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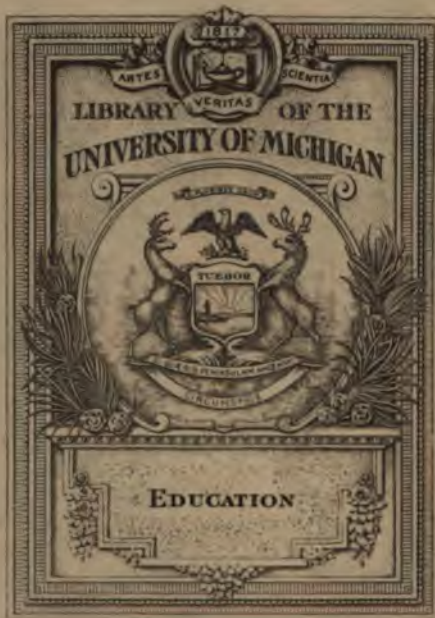
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[Introductory Letter to Volume 8 of the Series.]

Sir G. W. Kekewich K.C.B.,
Secretary of the Board of Education.

SIR,

I HAVE the honour to present to you the accompanying volume of Special Reports dealing with various educational subjects which are of interest at the present time.

The papers contained in this volume fall into three groups.*

(1) Education in Scandinavia, Switzerland, Holland, Hungary, etc. In this group, four papers are devoted to education in Scandinavia. Special reference is made in them to two questions: (1) the virtual abolition of Latin in the ordinary secondary schools in Norway, and the similar, though somewhat less sweeping, tendency in the Swedish secondary schools; and (2) the movement in Sweden for making elementary education more practical and a much more definite preparation for skill in handicraft. Both of these questions, in another form, are pressing on the thoughts of many English students of education, and it is hoped that the account of what is being done in Scandinavia will prove of special interest at the present time. Two other papers give detailed information as to the training and status of primary and secondary teachers in Switzerland, and describe the main features of the school system of Zürich. Another paper describes the historical development of the system of primary education in the Netherlands with special reference to its influence on English education and to recent important changes in Dutch educational law. Other papers give accounts of education in Hungary, Portugal and Servia; and one describes the Écoles Maternelles in Paris, comparing the methods adopted in those schools with those generally in use in infant schools in England.

(2) In view of the growing interest which is taken in the methods of teaching as distinct from questions of educational administration, some of the papers are devoted to discussions of the ways of teaching two subjects which are almost universally regarded as being, if well taught, of high disciplinary value—Arithmetic and Latin. The aim of the writers, whose proposals are based on long experience as teachers, is to suggest methods of instruction which will teach the pupils to think, and give them a real interest in their work. Connected with these papers is a suggestion for a re-arrangement of the order of teaching languages in some of our secondary schools, the writer urging that French, taught on the new methods and as a living

* Volumes 9 and 10 of this series, now at press, are devoted respectively to Education in Germany and in the United States of America.

language, should precede Latin, so as to provide a common foundation, throughout the lower forms of a school, for the classical and the non-classical sides of secondary instruction. The accounts of several school journeys show how much is being done to connect the teaching of geography and history and of some branches of science with the practical experience of the pupils. In recent years much has been done, especially in secondary schools, in England to develop the usefulness of school excursions on their educational side and in connexion with the school curriculum. But it should not be supposed that the school journey is a novel thing in English education. Another side of the same movement towards a less bookish training and in the direction of securing the gist of a liberal education through the scientific treatment of practical studies coupled with a sufficient literary discipline, is illustrated by the paper on an agricultural school. But it is obvious that the educational question is but one aspect of a much larger social and economic problem. The complexity of the question is illustrated by an account of the education, earnings, and social condition of boys engaged in street trading in one of our great cities.

(3) Another group of papers in the present volume is formed by a sketch of the history of educational work in the late South African Republic, and by an essay on the education of Asiatics, with special regard to experience gained in the Straits Settlements. These papers illustrate the immense variety in the educational problem which presents itself in different parts of the British Empire. The rapid diffusion of educational ideas throughout the world is illustrated by the fact that the "New Methods of Modern Language Teaching," as described in an earlier volume of these reports, have been adopted with much success in the teaching of English to natives in schools in Singapore.

I desire to express my thanks to the writers who have contributed papers to this volume, and to take this opportunity of acknowledging the courtesy of the Swedish and Norwegian, the Portuguese and the Servian Ministers in London, and of the Norwegian Department for Ecclesiastical Matters and Public Instruction for kindly granting permission for the publication of summarised translations of certain reports, as indicated in the synopsis of contents.

To each report is appended the name of its author, and it should be understood that the latter alone is responsible for the opinions therein expressed.

I have the honour to be, Sir,

Your obedient Servant,

MICHAEL E. SADLER,

Director of Special Inquiries and Reports.

December, 1901.

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THE NEW LAW FOR THE SECONDARY SCHOOLS IN NORWAY.*

The new law for the higher public schools passed by the Norwegian Storting in 1896 is not, as many believe and some have said, a leap in the dark, a random experiment. It is founded on our own school development; it builds upon the experience and attempts of other countries. Nor is it the creation of a chance current, a production of misty theories and vague sentiments, which, under chance conditions, have gained the upper hand. On the contrary, it has taken shape after years of deliberation, controversy, and investigation; and although it does not, of course, satisfy all parties, and is not approved of by all, it may with truth be said that on the whole it has found favour not only with the public but also with schoolmen.

If the law cannot be stamped as rash or as unhistorical, it is nevertheless allowable to say that it denotes the final and decisive rupture with the educational ideal, the educational means, and the educational organisation which have prevailed for centuries in all civilised lands, and which are still, though not unassailed or still possessed of the absolute sovereignty of the past, considered by many to be the best where there is question of development into true humanity, and the only ones when it is a question of discipline in scientific thought and all higher mental operations.

The Norwegian school has broken with the past in a twofold respect, has ceased in a twofold sense, in organisation and in culture, to be the grammar (*lærde*) school, the school of the renaissance. It is no longer an ante-room to the university's holy place and holy of holies. Nor is it a wholly isolated and independent institution, but rises like a lofty dome on the *folke* school's broad, plain building. It has, moreover, turned from the classical languages in order to find in the thought-world and science of the present day the means of educating youth and fitting it for life. Reasoning from the solidarity of the community and the universality of educational requirements, it has rejected the class school and the special school, and has tried to establish a united school, the universal (*almen*) school, divided

* The following paper is a repetition, in its main features, of a lecture given at a Scandinavian school-meeting at Nääs Slöid College, in Sweden. A brief sketch of the historical development of our higher school system and a few notes have been added to render it more comprehensible to English readers, while the most important paragraphs of the new law, and extracts from the regulations drawn up in pursuance thereof, and plans of instruction are added as an appendix. To this I refer my readers for a clearer comprehension of the lecture.

indeed according to requirements, abilities, and circumstances, but organically united, so that in the future there shall not be elementary (*almen*) schools, middle-class (*borger*) schools, *real* schools, and classical (*laerde*) schools, each leading a circumscribed existence, but one connected school system. Whether right or wrong, this is the fundamental idea; imperfect and incomplete in its adaptation, this is the intention. To defend the reforms or to attack them is not my immediate purpose; on the contrary, I shall try to represent them as they came into existence, and explain their relation to our national circumstances and way of thinking, and to sketch their great fundamental lines, though it is self-evident that the road will lead, oftener than I care for, over heights, when dwelling in the depths would afford more satisfaction.

Yet a few more prefatory remarks, in which will lie the chief explanation of the fact that it has been possible here to carry out so smoothly radical reforms which everywhere else would have met with stubborn, or even insurmountable, resistance. In the first place, it must be remembered that school-training here has always been under legislation, and a very minutely detailed legislation. This certainly gives it a certain immobility in cases of partial changes; but, on the other hand, it is a consequence of our democratic constitution that public opinion can rapidly and victoriously remodel the very foundation itself, while in countries where the constitution secures special interests and privileges, or where the initiative and accomplishment must come from higher quarters by administration, reforms are only carried out with difficulty, especially when they touch old fundamental conditions. In the next place, the fact must not be overlooked that the new law in reality indicates a final movement towards an assimilation of school and community. It is an axiom that there is, or tends to be, in nations a connection or agreement between their social structure and their school. The school is one of the decisive factors in the life of a nation, while, at the same time, it is formed according to the circumstances and requirements of that life. Its vitality is in proportion to its national spirit, and has taken form in lively interaction with the nation's evolution in other respects. In any case in our day, when human culture under strong national tendencies bears more and more the special stamp of the individuality of the people, it is important that the school in its organisation, its means and end—if I may use the expression—should be naturalised, *i.e.*, be recognised as an institution which serves the life-interests of the nation. This is without doubt one of the reasons why the classical school is nowhere maintained in the purity it had when culture was cosmopolitan and the exclusive possession of an international brotherhood, but is everywhere adapted more or less to the requirements of the people and the age; and if it still in many places maintains an influential position, which foretells a long life, although the sciences of antiquity have long since been outstripped by those of nature, and although the ancient languages have become dead languages

for the second time, the explanation of it all lies in the almost religious faith with which this school is looked upon by well-informed enthusiasts and artless ignoramuses as synonymous with a nation's intellectual greatness. It is thus in Germany, where I have found by personal experience that within wide circles there is a dogma which holds that German intellect has risen to its present height by means of classical philology and the classical school, and by these forces alone.

It may be that this is the case. Germany has had a great philology, a humanist-inspired thought and poetry. She has also, as a Prussian Minister of Public Instruction has said, predominating classes, which need a special school to maintain their leading position. It may be, too, that the same school is indispensable in France, where it is, in a certain sense, historically national; or in England, where from being the nursery of learning it has become a school for the aristocracy and plutocracy, with a peculiarly national system of education, but so conservative in its instruction that England, from a pedagogic point of view, occupies a position of the same "splendid isolation" as that which one of her statesmen has attributed to her politically. But in Norway we have no predominating classes to be the object of special care; we have, with all respect for clever, indeed distinguished philologists and Latin-speaking professors and priests, no brilliant classical-humanist traditions. The first torch-bearers of our intellectual life did not kindle their torches at the sacred fire of antiquity; their classicality, alas! was little to boast of. The classical school, which we retained from our union with Denmark, was not able under these conditions to lead a very vigorous existence; in a peasant nation, with a woof of a small and low-standing provincial middle-class, it was essentially a special school, a school for public functionaries, through which no very strong wind blew, with indifferent relations to the people, and met by them with an indifference which must sooner or later lead to its reformation or fall.

I cannot here dwell on the manner in which our higher public instruction developed during the fifty or sixty years after 1814. Its uneventful history has recently been fully related by Headmaster Voss in Wychgram's "*Deutsche Zeitschrift für Ausländisches Unterrichtswesen*," and I refer the reader to those excellent articles.*

I can here only set forth the prominent points in this development, whose principal features are common, indeed, to many lands, but which also has its own peculiar character, determined by the conditions of the people and the country.

* The State schools (Latin schools), which took charge of the higher education, and prepared students for the university, from the time of Norway's emancipation from the union with Denmark in 1814, until 1869 were arranged according to a law of 1809. They were at first very few in number (four so-called *kathedral* schools, in Kristiania, Bergen, Trondhjem, and Kristiansand), and poorly attended; but they grew gradually. The list of subjects was Norwegian, Latin, Greek, Hebrew, German, French, religion, history, geography, and mathematics. By far the greater number of lessons were devoted to the dead languages.

It may not be superfluous to remind foreign readers of the conditions under which Norway's independent political life as a constitutional State began. When, in 1814, she was separated from Denmark, after a union that had lasted for 400 years, declared herself a free and independent kingdom, and gave herself a constitution, which is rightly held to be the freest in the world, she counted a population of, at the most, 900,000. Of these, only 90,000 lived in towns; the remainder were scattered over the extensive country, whose area is that of Great Britain and Ireland, but where it seems as if nature must render all efforts to raise the people to a condition of enlightenment and culture fruitless. When this has nevertheless been done, when popular education has succeeded in becoming a well-organised and powerfully-working institution, this is due at once to the people's natural intelligence and thirst for knowledge, and the untiring labour which the Government authorities have felt bound to bestow upon the development of the school, because the constitution requires an enlightened people, and because it has been their ambition to keep on a par with the other Scandinavian countries, especially with Sweden, united as she is with Norway under one king. Our public education is one of the largest items in the budgets of both the State and the Corporation.

Our elementary (*folke*) schools' history I must not touch upon here, interesting though it is, but I will trace the chief movements in the development of the higher school.

In 1814 there were only, as mentioned, four classical (*laerde*) schools in Norway, the so-called *kathedral* schools. In the immediately succeeding period more schools were established after the same pattern. They were classical schools, inasmuch as Latin and Greek were their chief subjects, and formed the chief part of the curriculum; but the pedagogic reforming ideas of the nineteenth century had set their mark upon them. For instance, the mother-tongue was treated as a separate branch. Modern languages were also studied, and natural science, anthropology, and ethics had a place, at any rate, on their timetable. It will be seen that in these schools we are already met by the idea of an encyclopædic education, and so far it may be said that they are the parent schools of the common schools of our own time. But in reality they long continued to be under the influence of tradition, to be Latin schools in the actual sense of the word, and preparatory schools for the university. As such, however, they were not fitted to meet the requirements of the higher civil education, which the rapid unfolding of the nation's powers in the various fields of activity demanded. These wants were very poorly provided for by a few inferior middle-class schools. Leading statesmen could not but feel it their duty to remember this unsatisfactory state of affairs; but unfavourable economic conditions, and the want of clear and decided ideas on the subject of the organisation of a real school, give to the first efforts an intermittent and chance character. As a rule, a way out of the difficulty was found by attaching "real" classes to the existing classical schools in an entirely external

and inorganic way, with the consequence that these classes were regarded as an escape-valve for pupils who were not competent to read Latin and Greek. It is interesting to read in the Storting debates connected with the question of such reforming efforts how the opposition to the predominance of the classical languages, especially their predominance in Norway, where the conditions for an independent scientific life were considered to be so poor, begins to make itself heard, though as yet without awakening much response.

About the year 1830, however, a change began to take place. This period was in many respects, both intellectually and politically, a time of awakening for our nation. The peasants, who had hitherto not been quite conscious of the political power that the constitution placed in their hands, entered political life, and a stronger national spirit broke out in literature and intellectual life. This period saw also the yet more energetic rise of the great pedagogic culture question—"classical" or "modern culture." Influential politicians and schoolmen became the advocates of a more or less extreme circumscription of the study of the classical languages, and they succeeded to a certain extent in carrying their point. One active and influential schoolman, Mr. Nissen, had as early as 1845 in his large private school carried out the principles of a common sub-structure and a division into a Latin and a "real" side, the former with a six years', the latter with a four years', curriculum. This arrangement was sanctioned by the Storting in 1845 for small classical schools, whose means of existence was thereby assured, as the *real* classes brought them a not inconsiderable number of pupils. The three *kathedral* schools in Kristiania, Bergen, and Trondhjem continued their existence as purely classical schools. The new reform was far too lame, however, to afford satisfaction. The "real" side, with its shorter curriculum, was neglected, and the philologically-trained teachers and headmasters evinced little or no interest in it. Its advocates required that it should be extended, so as to secure for its pupils admission to university courses. On the other side, the defenders of the Latin school complained of the injury done to the study of the classical languages by the combination of the two forms of school. The establishment in 1857 of a mathematical-scientific teachers' examination, corresponding to the philological examination that had existed since 1820, was a gain to the *real* school, it thereby obtained trained teachers in its special subjects.

The contention between the two ideals of school training flared up with renewed violence at the close of the fifties, and fresh fuel was added to it. For instance, the growing national movement demanded the introduction of the study of Old Norse in the school; English, which had held a miserable place in the "real" side, was proposed as an optional branch on the classical side. But the sharpest contention arose on the subject of the motion to do away with Latin composition (translation from Norwegian into Latin), a motion which, in spite of violent opposition, was adopted by the Storting of 1857.

At the back of the criticism passed, in most varied quarters, upon the higher school there lay the common fundamental view that the school no longer answered to the degree of development that the nation's political life had undergone. In fifty years Norway had become economically and socially another country. Its population was doubled, its wealth increased, its old means of livelihood gave larger profits, and new ones had sprung up. The nation now no longer presented a picture of a patriarchal social system, whose business affairs were guided by officers of the State, while the peasants walked behind the plough or fished. The peasants had become conscious of their political power, and ranged themselves on the side of the Liberal elements in the towns, under J. Sverdrup's leadership. A real middle-class had formed in the towns along the coast, which stood in active communication with the outside world. The Norwegian social structure, which had been so simple, now began to be as varied as that of other European countries, though with a distinctly democratic stamp. The existing schools were insufficient for this, or ill-adapted. A higher education was needed, which should not be a one-sided classical education. *Real* schools were needed, which should not be neglected appendages of the classical (*laèro*) schools. Special schools were needed for art, manual work, and trade. Higher girls' schools were needed, and more education for the peasants. In many of these fields private initiative was active. It was during these years that the large private boys' and girls' schools in Kristiania* and other large towns began to flourish, that the first technical and mercantile schools were founded, that the elementary (*folke*) school, from being an essentially religious school, became a school for general civic education, and that the attempt was made by clever, enthusiastic men to transplant the system of high schools for the people (*folkehoiskole*) from Denmark.

But these and similar efforts are of a chance and disconnected character, and are retarded in their growth by poor vital conditions, and the obvious problem presented itself of arranging the various forms of school, whereby an attempt was made to further an education going beyond that of the elementary (*folke*) school or school for the poor (*almen*), as it was then called, within a common setting, and by this union of forces to produce greater vitality. This was the aim of the efforts made in the sixties under Hr. H. Nissen's guidance, and led to the law of 1869. Here we first meet with the idea that the elementary (*folke*) school may serve as a preparatory school for the higher school, though only, it is true, as regards the first three years, and this was in reality only a paper provision, as special preparatory schools were established for the higher schools. So imperfect as

* Since the establishment of Nissen's private school in Kristiania in 1848 the higher instruction in this town has principally been imparted by private institutions. At present there are three higher boys' schools in the town, with a twelveyears' course and right of examination (Aar's and Voss's, Gjertsen's and Otto Anderssen's), besides several *middel* schools for boys and girls (nine to ten years' course). There is a higher private school, Ambro's school, in Bergen.

yet were the conditions of the elementary (*folke*) school, and so deeply-rooted the idea that the higher school must go its own way from the beginning! All more intermediary instruction was gathered into the so-called lower secondary or intermediate (*middel*) school with a six years' curriculum—from the age of nine to that of fifteen, divided at the age of twelve into a Latin side and an English side. The step of making the lower secondary school (*middel*) school into a mixed school was not yet ventured upon. On the lower secondary (*middel*) school in its turn was built the three years' Latin *gymnasium*, with a highly concentrated syllabus, as more than half the total number of lessons was devoted to Latin and Greek alone, and a *real-gymnasium*, in which, on the other hand, the lessons were widely distributed between mathematics, the natural sciences, languages and history.

Such were the external lines of this school organisation, of which the aim was simultaneously to afford a preparation for civil life and for the university, to give the child such encyclopædic elementary knowledge as may be useful to him in the varied occupations of practical life, and to give the youth that personal education that the more self-dependent university career demands.

I would here interpolate the remark that the law made no provisions for the feminine portion of our youth, which here, too, was by no means inconsiderable. Either from forgetfulness or out of delicacy—I know not which—the authorities did not lay the hand and restraint of the law upon the education of girls. It was allowed to grow according to its own sweet will, taller and more luxuriantly in the few places where social and economic conditions were more favourable, stunted where the surroundings were unfavourable, until the emancipation movement and the struggle for existence began to lop off the suckers which in the course of time had grown up round the one great truth: that man and woman, intellectually and ethically, are not essentially different in the sense that they each require a separate school, that development of the brain and heart is the right of both, and that what the human intellect has gained ought to benefit both without distinction. From that moment the girls' school also became an object of public interest, and received here and there public support as an independent institution, with an increasingly marked leaning towards the curriculum of the boys' school.

The new law was a compromise between classical humanism and realism, and it was the hope of its authors that this compromise would have permanently settled the dispute between these two educational ideals. While the lower secondary (*middel*) school, with its termination at the age of fifteen or sixteen,* proved to

* The *middel* school concludes with a leaving examination after nine years' normal school attendance (reckoned from the age of six as the commencement). The examination is in the following branches:—Norwegian,

be a happy idea, raising the standard of our middle-class education, and even becoming a kind of stamp of good breeding, aspired to by nearly every decent person, the treaty between humanism and realism suffered the fate of all treaties of peace. They are concluded for all eternity, but eternity turns out to be a figure of speech. The further development of circumstances soon showed that in the long run there was no hope of seeing the wolf and the lamb feeding side by side in idyllic peace. The superiority in the competition which the Latin *gymnasium* manifested during the first few years gradually disappeared. The *real gymnasium* got wind in its sails, more, indeed, under the influence of political, social, and practical causes than from any pedagogic reasons. The awakening and growing democracy, in which national and social-radical elements are mixed, sees in the classical school one of those privileges which must be removed at any cost. The influence of natural science on practical life, where men are naturally led to a utilitarian valuation of education, the increasing productiveness of the *real gymnasium*, particularly as a consequence of the rapid development of improved methods of teaching modern languages,* combined with the decided sympathy of reformist and interested pedagogic circles, all this gained for the *real gymnasium* an increasing clientage and increasing sympathy for the idea of a higher school, wholly or principally built upon the science and culture of the present day, national and foreign. At the same time, an energetic legislative activity aims at making the elementary (*folke*) school into a school for the people in the true sense of the word, and the demands for an organic connection between it and the lower-secondary (*middel*) school gain in strength by talented and thorough work, not least from men of the higher school. In spite of divergent opinions in matters of detail, the advocates of the reforms are united in the fundamental idea of bringing about the unity of the school in all essentials, in order thereby to forward the ideal aim—the solidarity of the people. These tendencies found expression in the Storting of 1890 in a series of warm debates, which led to the appointment of a Royal Commission, with instructions to make a draught of a reform of the higher school, instructions which contained fundamental problems, among them being the particular organisation of the higher public schools, the position of the classical languages, physical training, the position of the girls' school, etc.

German, English (or Latin), mathematics, religion, natural science, history, geography, French (optional), drawing, and writing. The examination is conducted partly by paper work and partly *viva voce* in the first four of these branches. The *gymnasium* concluded with an examination called *examen artium*. The examination in the Latin *gymnasium* is held in the following branches:—Norwegian (written and *viva voce*), Latin (written and *viva voce*), mathematics (written and *viva voce*), religion, history, geography, Greek, French (or English). The examination in the *real gymnasium* is held in Norwegian (written and *viva voce*), English (written and *viva voce*), mathematics (written and *viva voce*), physics (written and *viva voce*), religion, French, history, geography, natural science, and drawing.

* The influence which Johan Storm, professor in Romance philology, has exerted in his teaching should here be especially mentioned.

The Commission* worked from 1890 to 1894, and from 1894 to 1896 the subject was under discussion in the Cabinet and the Storting. It must at least be owned that the matter has been gone into thoroughly. The university and schools, pedagogic associations, and the Press discussed the subject, the last-named, however, to an unexpectedly small extent. What direction did the development of the question take under the action of these various forces? In the Commission, the representatives of Conservative views were in the majority, but their attitude was a yielding one from the very beginning, doubtless in the belief that moderation was wisdom. The effect was to weaken their adherents' zeal and eagerness to fight, without conciliating their opponents. It soon became clear to all that the ideas of the minority, and of these the most advanced, would triumph by virtue of the attractiveness of the consistency which always distinguishes the Radical standpoint, and by virtue of their congruity with the democratic social efforts. I do not intend by this to disparage in any way the pedagogic value of these ideas, or the arguments with which they were put forward; on the contrary, in all essentials I am myself a votary of them, and have none but the highest opinion of the talent and thoroughness with which the different sides of the question were treated. As an instance of this I would point to the exhaustive discussion of the question of classical training by Hr. Horst, and still more by Hr. Voss—in my eyes one of the fullest, most competent, and most objective that I am acquainted with.

But to cut the matter short—when the report of the Commission was sent in to the Government, the latter left it alone for the time being. When the change of Ministry in 1895† made Jacob Sverdrup Minister for Church and Schools, he brought in a Government bill, which practically gave its support to the views held by the minority, Hr. Voss, and in this way supported a Latin *gymnasium* with optional Greek. When the Government bill came before the Storting, the latter gave its support in all essentials to the most Radical minority, Horst; they even went a step farther, and resolutely struck Latin out of the list of subjects, and moreover rejected all attempts at a temporary transition period for the union of the two schools.‡

* It consisted of the Departmental Secretary, D. Fd. Knudsen; School Director Holck (for the elementary (*folke*) school), and Headmasters Horn, Schreiner, Horst, and Voss.

† The Government was Conservative under the leadership of Emil Stang. Its Minister for Ecclesiastical Affairs, Dr. A. Chr. Bang, formerly professor in theology, had sat for a short time on the Commission, and had then voted with the majority. In 1896, as a consequence of the disputes with Sweden, a compromise Government was formed of the three parties in the Storting, Liberal, Conservative, and Moderate, under the leadership of F. Hagerup. Jacob Sverdrup, a nephew of Johan Sverdrup, belonged to the Moderate party.

‡ The whole Commission, with the exception of one member, had sided with the proposal to build the higher school on the second division of the elementary school, but the majority desired to carry out this arrangement gradually, pointing out that the elementary school was not yet sufficiently developed to give the preliminary education necessary for the higher

Out of the trials of the Church Committee* and the purgatory of the Storting debates arose the following school organisation:—

The *folke* school was to be the common preparatory school for all. Upon its second division, after the fifth school-year, the *middel* school is built. Thus no instruction in foreign languages begins before the child's sixth school-year. When the *folke* school is raised to its full efficiency the next step will be to build the *middel* school as two-yearly on the complete *folke* school, which, in such a case, must be furnished with instruction in modern languages.

The *middel* school is an undivided school. According to the law, it is "a children's school, which, following in the steps of the *folke* school, gives its pupils a complete, thorough, middle-class education, adapted to the receptivity of childhood." It concludes with a leaving examination.

On the *middel* school is founded a double, three years' *gymnasium*, (a) a *linguistic-historical*, with principal stress on modern languages and historic branches of study; (b) a *real gymnasium*, with chief stress on mathematics and scientific subjects. A close fellowship is also maintained, especially in the first class, between the two branches. The *gymnasium*, according to the law, is "a school for young people leading on, with the *middel* school as a starting-point, to a higher public education, which also prepares the pupil for scientific studies." The *gymnasium* concludes with a leaving examination, *examen artium*, which, among other things, gives admittance to the university.

Both *middel* school and *gymnasium* ought to contribute towards the religious and moral training of the pupils, and mentally and physically develop them into capable young people.

Such was the foundation and superstructure of the building; let us now look a little more closely at what it contains. If we turn to the *middel* school, we notice immediately that the strong point is instruction in the mother-tongue. To it has been awarded a greater number of hours than in any other European country—in my eyes, a distinct step in advance.

school. According to the law of 1889, relating to the elementary schools of the towns, these consist of three divisions—1st from 7 to 10 years of age, with compulsory school attendance of from 18 to 24 hours weekly; 2nd, from 10 to 12 years, with school attendance of 24 hours; 3rd, from 12 to 14 years, with school attendance of from 18 to 24 hours. The local board can also add to the 2nd and 3rd divisions 6 hours' voluntary instruction. Out of consideration for the *middel* school, children were allowed admittance to the 1st division on the completion of their sixth year.

* The Church Committee is a Committee of the Storting, and has the duty of preparing all questions connected with the Ecclesiastical and Educational Department for presentation to the Storting. The Storting debates were very lengthy. The motion of the majority in the Commission, supporting the Latin *gymnasium* with optional Greek, was defended, especially by the former Minister, Bonnevie, who is himself a mathematician; while the theologian Wexelsen, who had formerly been Minister for Ecclesiastical Affairs, and is so again at the present time, and Horst, the philologist, spoke in favour of the exclusion of the classical languages.

The New Law for the Secondary Schools in Norway. 11

Through the mother-tongue is the natural road to national education and national ways of thinking. The highest aim of the school should be to arouse a love for the mother-tongue and the world of thought and feeling which is contained in its literature, a full and free command over it, and respect for its purity. This requires skilful guidance and a deep study of its contents, and, in our case, more time, inasmuch as both the ordinary written and spoken language and the popular dialect* claim their share of attention. Even if only one of them is to be written, they both have to be read.

TIME TABLE FOR THE LOWER SECONDARY (*Middel*) SCHOOL.

Classes	I.	II.	III.	IV.	Total.
Age	11-12.	12-13.	13-14.	14-15.	
Religion	2	2	2	1	7
Norwegian	5	4	4 ⁽¹⁾	4 ⁽¹⁾	17
German ⁽²⁾	6	5	5	5	21
English ⁽³⁾	—	5	5	5	15
History	3	2	3	3	11
Geography	2	2	2	2	8
Natural Science . .	3	2	2	3	10
Arithmetic and Mathematics . . .	5	5	5	5	20
Drawing	2	2	2	2	8
Writing	2	1	—	—	3
Gymnastics	3	3	3	4	13
Manual Work . . .	2	2	2	2	8
Singing	1	1	1	—	3
Total	36	36	36	36	144

⁽¹⁾ In Classes III. and IV. a Norwegian hour every other week is given to writing.

⁽²⁾ Alternative—English, 6, 4, 3, 4.

⁽³⁾ Alternative—German, 0, 6, 7, 6.

* Through the long union with Denmark, the written language of that kingdom also became the written language in Norway; and the spoken language of the towns and the adjacent districts was so strongly influenced by this that a gulf opened between the language of the towns and that used by the people in the interior of the country and the fjord districts of the west. The latter is descended in a straight line from the Old Norse, in which, as is well known, a rich mediæval literature is written. On its discontinuance, the language fell apart into dialects that owned no real literature. Fifty years ago a movement was made by the talented peasant-poet and philologist, Ivar Aasen, towards making a common written language for these dialects, and through it preparing for the superseding of the ordinary book-language. He formed the so-called *landsmaal* (country tongue) as a sort of common denominator for the dialects. This language already has a considerable literature (Vinje and Garborg), and is warmly supported by the *Storthing*, in which peasants form a powerful element.

In the lower secondary (*middel*) school only two foreign languages are learnt, German and English, both with a large weekly number of hours, the one for the first four years, the other for the remaining three, but with liberty to begin with either. Their aim in all essentials is identical, and we notice that the law lays special stress on oral and written employment of the language within certain limits. I shall return to the subject of methods and means of instruction later on.

In *natural science* the object is to impart "a knowledge of the most remarkable animals and plants, principally native, and those most important to man, as well as of the structure of the human body, and the functions of its organs, with the outlines of hygiene, in which is included instruction in the effects and dangers of intoxicating liquors; also a knowledge of the most important natural phenomena, and of the laws of the forces acting through them."

In *arithmetic and mathematics*, according to the new law, the theoretical side gives way to the practical. It is practical arithmetic in its application to the ordinary conditions of everyday life, simple book-keeping and applied geometry, which are placed in the foreground, while the arithmetical course does not extend beyond equations of the first degree, and chiefly has to do with stating as universal laws what the pupils have already made practical use of.

Finally, I mention here that in the provisions of the law relating to other subjects we meet with the same direct aim at the connection of knowledge with daily life, and its utilisation—for instance, in the stress laid on Norwegian history, the social orders of the nation, introduction of perspective drawing, and last, but not least, in the larger space given to the physical branches, gymnastics and manual work. The last-named demands more detailed reference. Among the questions placed before the school commission was that of the *physical training of young people*. This question has led to some most valuable investigations and most important decisions connected with school reform. I need not here enlarge upon the way in which men's eyes have been more and more opened, especially during the last century, to the dangers of a one-sided intellectual training, how the body was reinstated as the temple whose purity and strength were a fundamental condition of the health and harmony of the mind. I need not dwell on the slowness with which this view has worked its way "from sounds to things," how, in the most diverse countries, it has nevertheless led, by degrees, to school hygienic investigations and school hygienic reforms of greater or less extent; how, too, it has sometimes been accompanied by declarations and claims which have more to do with imagination than with common-sense and reality. What this deeper and more universal human valuation required of education and school can be summed up under two principal formulæ: (1) a thorough hygienic principle in everything connected with the external conditions for the children's development, such as school buildings, apparatus, light and air, hours of study in school and

at home, medical inspection, etc.; (2) a curriculum which should promote an expansion of the inborn physical aptitude, by a rational distribution of work and play, systematic gymnastics based upon physiological principles, with the object of creating the health, the feeling of physical strength, and the elasticity which are an almost indispensable condition of an active life, and, finally, a training of the child's practical need of occupation, by instruction in manual work suited to his ability and powers.

It cannot be disputed that the first demands have been more willingly and quickly met than the last, both because the necessity of the former was more self-evident, and because they do not interfere with the internal mechanism of the school, nor disturb the inherited idea of school as an institution for the cultivation of mental abilities. It has long been insisted upon as regards the boys at any rate, that it is the duty of the home to look after their practical talents—a thought no less beautiful than it is unsubstantial—and also experience has long been wanting with regard to the species and form of this practical instruction. Thus while the no small amount of liberality as regards school buildings and apparatus has long been a cause for congratulation, the procuring of a larger space in the programme for physical exercises was a less easy matter—especially as applied to the folke school; and as to manual work, if it existed at all, it was as a voluntary supplement in an extremely uneducational form.

What the new school law has established or planned in this direction may have the most far-reaching importance for our children's future. In the first place, the unusually thorough medical examination of school children under the most varied local and climatic conditions, brought into effect by the commission, secured a comparatively favourable general sanitary condition among the children, and has proved that no essential blame in the case of morbid phenomena can be attributed to school life in itself, when this is carried on under normal conditions. More favourable hygienic conditions, and a greater circumspection on the part of the school in watching over the children's physical development, showed particularly favourable results.* In the next place a sure foundation was laid for a school and subject arrangement that was in accordance with hygienic requirements.

* The examination included the height and weight of the scholars at various ages and at various times of the year, the general condition of their health, the commonest cases of ill-health and their connection with hereditary disposition and hygienic conditions at home and at school, the daily hours of study at home and in school. The examination included girls' schools, boys' schools, and mixed schools. The Commission state as the chief result of the examination: (1) "The condition of health among the pupils of our higher schools cannot be said to be unfavourable, nor is the physical development, on the whole, checked. In this respect the condition of our school-children seems to be more favourable than that in the two neighbouring countries.

"There appears to be more ill-health, on the whole, among the female school-children than among the male, though a comparatively large proportion of the occurring cases of ill-health cannot be said to be sufficiently

Upon these examinations are based a series of measures in the new reform, which, directly or indirectly, have the care and growth of the body as their aim. Among these may be named an extension of the gymnastic instruction, and its adaptation to the needs of the various pupils as far as this is possible, a diminution in the daily number of school-hours, extension of school holidays, regular medical inspection, introduction of instruction in hygiene, simplification of examinations, and so forth, and, lastly, the introduction of Sloyd as a compulsory subject. The way for this last reform was already paved by the energetic manner in which the private schools in Bergen and Kristiania had taken up the matter in the eighties. Herr Otto Salomon, the director of the Sloyd College at Naäs, had the opportunity of personally following their first attempts. It gives me great pleasure to be able to state that in the *folke* school, as well as in the higher school here, Sloyd has now not only become a compulsory subject, but is generally recognised as a necessary link in every rational arrangement. I do not hesitate to say that by this measure a momentous and felicitous step has been taken in our country towards realising the great thought of the age—an education in obedience to the laws of nature and the child's innate need of occupation.

I now turn to the *gymnasium*, whose arrangement of subjects will be seen from the time-table below. As a Latin side will be found there, I will at once point out that this is a temporary arrangement by virtue of the law's tenth paragraph, which, with the consent of the Education Department, permits of certain departures from the normal plan, a paragraph which may become a valuable escape-valve for the searching and testing initiative which the school can ill do without. When I declare as my personal opinion that this study of Latin must still be retained, I know that it is shared by most of my colleagues, even by those who do not desire to have the classical school again. This, moreover, is quite beyond the limits of probability. The battle on this subject has been fought out in this country, and the last great skirmish took place in the Commission. The three-sided combat which was there fought was an interesting unfolding of arguments with which we are familiar from the European struggle in the cause of culture, and to which ingenious psychology, exact science, historic thought and artistic and literary education have contributed. It is an interesting passage of arms, a valuable addition to the literature which this universally burning question has called forth; but when I look back upon the events of recent times, it is clear to me that the

serious to warrant the characterising of the patients as ill, even if they diminish their working powers to a greater or smaller extent.

"(2) With regard to the question as to how far these ailing conditions are actually due to school life, there can be no decided answer. As far as the girls are concerned, a comparatively large number of symptoms of illness occurring among them may be traced to peculiarities of the feminine nature, and thus far are due to circumstances outside the school; but they presumably develop more rapidly during school life, and thus make the sufferers less fitted for hard school work."

decision did not lie in the arguments, but, as has been previously mentioned, entirely in the movement in our nation in the direction of national and modern culture, a movement arising from historical, national, and political elements. Our nation is democratic, realistic, and practical, and it desires the school to fulfil the requirements and tendencies of the age. It will not recognise—justly or unjustly—an education which, at a respectful distance from present reality, and unmoved by its pressing claims, works at the building up of the “purely human personality.”

But it is seemly that lawgivers should rise above the level of an opinion, especially school-lawgivers, who know that questions touching human beings cannot be decided on the same lines as can matters of purchase and sale, property and gold. If they do not wish to lower the school to the position of slave to an earth-bound, utilitarian theory, they must give it compensation for what they have taken from it, in the shape of new means of culture. Instead of the old school we have a *realgymnasium*, which has not unworthily fulfilled its aim of giving a higher mental development on modern bases. But it was generally recognised that according to its plan this school suffered from a narrowness in the range of its curriculum, which was not favourable to the concentrated and harmonious mental training which, in its capacity of a school for youth, it was its object to promote; and it was also acknowledged by those of its friends who were not fettered by narrow special interests to have become, in far too marked a degree, too much a professional school, where mathematical branches absorbed the working powers and interests of the pupils to an unnatural degree.

It might now be thought that by pursuing the fundamental idea of the unity of the common (*almen*) school, which has met us at earlier stages, we would stop at a reformation of the *realgymnasium*, and make that into the only official school for young people, as the elementary (*folke*) school and the lower secondary (*middel*) school had been made into the only official school for children. The idea was not without its advocates, and I myself took up the cudgels for it, but it gained little sympathy. It met with opposition, partly from the conception which sees in the more strongly-marked individuality of the youth at the age of puberty a call for greater freedom of choice in ways of education, partly from realistic, special-subject interests, which see in every restriction a denial of the cultural value of these branches, a danger for the authority of the realist teachers in the school, and their whole social and economic position.

Towards the conclusion of the labours of the Commission Horst threw out the suggestion of a linguistic-historical *gymnasium*, very much after the pattern of the French school, founded on *humanités modernes*. The idea came so late that it escaped the discussion of both the school and the university, at first aroused surprise and doubt, but by degrees made its way, so that the motion, in a somewhat modified form, became a Government bill and a Storting resolution.

The arrangement of the *gymnasium*, which finally arose out of the lengthy discussions, was thus the *real-gymnasium* and the *modern language-history gymnasium*. (1) A glance at the table

TIME-TABLE FOR THE GYMNASIA.

A = "real" side. B = language-history side. C = Latin side.

Line	A.			B.			C.		
Class	I.	II.	III.	I.	II.	III.	I.	II.	III.
Religion	1	1	2	1	1	2	1	1	2
Norwegian	4	5	4	4	6	5	4	5	4
German	3	3	3	3	3	3	3	3	3
English	4	3	2	4	7	6	4	2	2
French	4	2	2	4	4	4	—	5	4
Latin	—	—	—	—	—	—	6	7	7
History	3	3	3	3	5	5	3	3	3
Geography	1	1	1	1	1	1	1	1	1
Natural Science	4	5	6	4	1	2	4	1	2
Mathematics	4	5	6	4	2	2	4	2	2
Drawing	2	2	1	2	—	—	—	—	—
Gymnastics	6	5	5	6	5	5	6	5	5
Singing	—	1	1	—	1	1	—	1	1
Total	36	36	36	36	36	36	36	36	36

will show that their unity is preserved in the 1st class, while the division begins at the 2nd class with a strong array of mathematics and natural sciences on the one side, and languages and historical subjects on the other.

Norwegian appears on both sides, with a considerable number of hours, which will require of the teachers a corresponding mental development, literary and linguistic training and pedagogic insight, if it is not to be misused or squandered, and which utilised with the right ability and understanding will yield the most valuable contribution to the education of the young. The subject has, too, a considerable material to work with, as not only is a large selection to be read, made from the productions of the literary language and the popular dialect, but the pupils are also introduced to Old Norse and the historical development of the language. In addition to this there is a translation of selections from Greek literature, a provision which will be appreciated by all—and there are many—who are glad that the young are not

entirely excluded from personal acquaintance with certain of the best literary productions of antiquity.

As regards instruction in foreign languages, in German and English it is built upon the foundation laid in the lower secondary (*middel*) school, and aspires to impart a greater skill in their written and oral use, as regards English, with the difference in aim that comes of the language on the one side being a principal subject. Here, then, the pupils are to be led to aim at being able to give in a free form a written account of a subject taken from the field of literary and historical knowledge into which they have been introduced by their studies. But in recognition of the danger to which the educative value of instruction in modern languages is exposed through the accentuation in recent times of language as a living means of communication—*les langues sont faites pour être parlées*—it has been made an aim in German and English instruction, indeed the highest aim, to lead the pupils, through the reading of authors and by the aid of history, into the nation's culture as it appears in its literature and social life. By this an additional stress is laid on what was also the desired object of the provisions relating to the teaching of Norwegian, namely, that the aim of modern educational lines is in no respect lower than that of the classical school, and that the law does not hesitate to give to the task of teaching the fulness and exacting character, for teachers and pupils, which can make the work of reaching the goal intellectually and ethically a progress of constant development.

In *French*, too, which is entirely relegated to the *gymnasium*, and which, for that reason, unfortunately—as many lovers of that beautiful language and its rich literature will say with justice—is forced into the background by the two other languages, the effort is made to give the pupils, through a study of the language, a comprehension—naturally limited—of French culture, history and national life. This excludes all possibility of devoting any of the small number of lessons to written exercises.

To what extent the law aims at making the school serve life, or, indeed, actually introduce the pupil to the tasks and duties which social life requires of every citizen of a free State, is most clearly apparent in the aims it sets up for its *history* teaching. As is right and necessary for a small nation whose own history alone is too limited to give that breadth to historical conceptions which can lay the foundation of that universality and freedom from prejudice in the comprehension of social movements, that a nation like ours can ill spare, it places, as the first requirement, a general knowledge of universal history. On this substratum is built a fuller account of the more prominent parts of ancient history, Norwegian, French, English, and German history, more exhaustive as regards the last century. On the linguistic-historical side is added the reading of selections from historical authors of various periods, and a somewhat closer acquaintance with the history of culture during the last century, to which it has been proposed to give the form of an account of

the more important features of sociology. In both *gymnasias* there is to be an introduction to the political and social institutions of the principal countries. As will be seen, history is placed in the closest connection with the political and social movements of our day. There are some who look upon this connection with some anxiety, regarding it as a dragging of politics into the school, and degrading history into the position of servant to them. But let such remember M. Lavis's words: "History is the politics of the past, politics are the history of the present." The connection that exists between history and politics is natural, not artificial, and although history has other ends in the school than that of making the pupils acquainted with actual social movements, we must not forget that in free States we are all, voluntarily or involuntarily, co-workers and co-responsible, and being so, can only be gainers by the information and knowledge that may be acquired through a study of the history of State life and social theories.

On the remaining branches, I will only offer a few remarks. The object in *geography* is a more extensive knowledge of the essential parts of mathematical and physical geography, and a general knowledge of the topographical geography and of the economic conditions of Norway and other countries.

In *natural science* the object is a knowledge of the most important chemical laws, of the development and life of animals and plants, and of the fundamental features of human physiology and hygiene. On the technical side, also, more knowledge of physics. In all the branches, the temporary plan emphasises the theory that instruction shall lead the pupils by means of experiments to a knowledge of the laws of life's functions and development, and the theoretical confirmation and mutual connection of the natural forces.

In *mathematics* the instruction is to be continued on the lower secondary [*middel*] school basis. In the linguistic-historical *gymnasium*, arithmetic, geometry, trigonometry and solid geometry are studied. In the *real gymnasium* are included the elements of analytical geometry, and the properties of integral functions.

One consequence of the new law will be that in future there will not be many people in our land who have received their education through the study of the ancient languages and their literature. Will another consequence be that classical studies and classical scientific research cannot be prosecuted in our land by the few who feel the call to do so, at the university? We will hope not. Whatever we may think of the justification for the study of Latin and Greek in the schools, one thing is indisputable—namely, that they are in their right place in the university, so long as men do not fly from their own past, deny the continuity of culture and the rich thought-world and noble artistic form in which it is cast, so long as philology and theology succeed in attracting and captivating minds with their problems. But it is self-evident that the conditions for these studies are made hard, though not impossible

by the new law. Presuming that the optional Latin line will be allowed to remain—and I see no reason for the contrary—it will be possible to provide an elementary Latin foundation, upon which the university can build. During the discussions which, up to the present, have been bestowed upon the subject of a reform in the organisation of the university, opinions have been collected about a substitute for the piece of patchwork called *examen philosophicum*,* with preliminary courses of three terms, which, in the case of philologists and theologians, were to be concentrated on one or both of the classical languages. With the empirical rapidity with which interested young people can acquire languages, and a method adapted to their age, it is probable that the necessary foundation for subsequent scientific studies will be forthcoming.

To complete the description of the new arrangement an account must be rendered of those organs by whose superior help the schools are guided, and of those by means of which it is sought to concentrate and give life to the internal operations of each school. Here, however, I must confine myself to mentioning that the educational department have appointed a competent council on education, consisting of seven members, to help in the inspection of the schools and the arrangement of the leaving examinations, which seems likely to become an influential factor in the government of the schools. Further, that civic influence is considerably strengthened by the *Skoleforstanderskab* (municipal governing body) attached to each school, as it has not only had the administration of the school's finance assigned to it, but also the right of proposing the choice of sides and the right of nomination in the appointment of school officers. Further, that the authority of the staff meeting is extended, with a corresponding restriction of the almost unlimited sovereignty formerly assigned to the head master.

Clerical influence in the school is wholly restricted to supervision of religious teaching, and a statement about the lesson-books appointed for it.

In concluding this account I must in a few words mention the position of the *girls' school* under the new law. A series of provisions in it clearly indicate that all municipal and government schools alike are to be open to girls as well as boys, that is to say that the mixed school is established as an institution. It is true that both Government Bill and Committee Report declare that the question of the arrangement of the girls' school cannot yet be considered to be finally solved; it is true that in the

* Those who have gone up for the school's leaving examination, *examen artium*, have the right to matriculate at the university as students. Before, however, they can begin their studies in the various faculties—theology, history and philosophy, mathematics, natural science, law and medicine—they have to pass an examination in a series of subjects—history, languages and natural science. This examination, the preparation for which requires, as a rule, from 12 to 18 months, is called *examen philosophicum*, and is intended partly to supplement the teaching of the schools, partly to accustom the students to more independent study. At present this examination is not very well arranged.

large towns, separate girls' schools still exist as private schools, but subsequent utterances of the Education Department point decidedly towards the official recognition of the mixed school, and to the fact that separate girls' schools will not be able to count on public support. The consequences of this have already appeared in the circumstance that a few girls' schools in small towns have had to be closed. The fear of further consequences of this movement has led to a union of the larger girls' schools with the object of upholding the separate girls' school as a legitimate and self-dependent institution. The law also establishes a necessary difference between the girls' and the boys' gymnastics and manual work, and it also makes room for that subject so important for feminine development, and so highly prized by many as a school subject—domestic economy.

It is one thing to mould the clay and another to endow it with the vital spark: it is one thing to put a law on paper, and another to carry it out in reality. After having at last, *per tot discrimina rerum*, been brought into port, its authors were able to say, as Gambetta said about the republic: "The time of dangers is past; now begin the difficulties." The new law found itself face to face with an elementary [*folke*] school which, in spite of very fair endeavours, in but very few places, if indeed any, was ready to take upon itself the new duties that were imposed upon it. It found a staff of teachers disorganised and discouraged by the *laissez-aller* principle pursued by the Government authorities for many years,—and in this particular, one government was just as good as another—overgrown in point of numbers from the absence of any system of pensions, tortured financially by conditions of remuneration which rendered it the most unfavourably situated of all the professions, and, moreover, with a training which, so far as a large percentage was concerned, was adapted to the requirements of the school before 1869. It encountered the natural unwillingness to take up new financial burdens which Norwegian ratepayers possess in common with those of other countries.

It is but fair to say that the work of making straight the way for the happy progress of the law was not long postponed.

Regulations drawn up by professional men not only arranged the necessary details of organisation and examination, but also furnished a well worked-out plan of instruction which, as regards the lower secondary school, has already started in life, and as regards the new *gymnasia*, is sketched out and awaiting completion before coming into force in 1900. The distinguishing feature of this plan of instruction is, on one side, a thorough methodical system for each separate branch, and on the other side—and it is not the least important—the energetic holding up of the school as a unit, and the necessity for concentration of the instruction, and the teacher's obligation to arrange his work according to the general humanising aim of the school, an obligation which assumes that the teacher himself can rise to the conception of the fact that the varied material is not a series of detached details, but organic joints in a unit, and that he has

the power to transmit the same idea to his pupils. A word in season; for one of the weak points about our school has been the marked professional feeling of the teachers. Like the sheriff in Ibsen's "Brand," they might have said:

"We also always do our duty,
But always in our own district."

The dangers which an encyclopædic school brings with it thereby became all the greater.

The last Storting can place upon the record of its list of merits two resolutions relating to the higher school. The one is a greatly-needed reform in the financial position of teachers. Attempts to change the teachers from irremovable to removable functionaries—I ought to say that the projects sprang from pedagogical considerations—were rejected by the energetic behaviour of the teachers, especially through their general union. The Storting now did away with the unnatural distinction between municipal and government school teachers*, and repealed the much abused class-teacher institution, which, from a transitory position of probation, was made, contrary to all expectations, into a permanent teachership, which saw its possessors, wrinkled and grey-headed, with a larger increase of salary for long service, etc. It is to be hoped that it will not be long before a system of pensions will promote the flow of the current that is necessary for the vitality and working powers of the profession.†

The second resolution was a raising of teachers' travelling scholarships to the rather considerable amount of kr.15,000 (nearly £900), to enable as many as possible to become capable, by going abroad, of satisfying the requirements which the teaching of modern foreign languages imposes according to the new plans of instruction.

One thing remains to be done, the most important and the

* The government school teachers were (1) headmaster (*rektor*), with an annual salary of from kr.4,600 to kr.5,800 and free lodging, with an increase of salary for long service; (2) second masters (*overlærer*) with an annual salary of from kr.3,000 to kr.4,600, with an increase of salary for long service; (3) assistant teachers (*adjunkt*) with an annual salary of from kr.2,200 to kr.3,600, with an increase of salary for long service; and (4) class teachers with an annual salary of from kr.1,500 to kr.2,000, with an increase of salary for long service. The three first-named teachers are irremovable State functionaries. The last-named position was intended to be a short probationary position for young teachers, but it was not maintained. Many teachers in the higher positions, on account of the absence of pension laws and age limit, remained at their posts far beyond the age of efficient service, a circumstance which hindered promotion, and made the position of the subordinate teachers exceedingly precarious. Many did not become assistant teachers until they were over forty.

The municipal teachers were on the average far worse paid, and in some cases considerably worse, than at the better private schools. Through the efforts of teachers in private schools service in recognised (*examensberettigede*) private schools has lately, to a certain extent, been reckoned as equal to service in the State schools.

† A bill for a general pension scheme for all government officials, based partly upon contributions, partly on a Government grant, is already drafted, and will shortly be brought under the notice of the Storting. In consideration of the unfortunate position of teachers, it is proposed that the percentages of the Government grant shall be greater as regards them

most necessary, the carrying out of which will now enable the new school to develop any educational conditions that it may contain—a reform in teachers' training. The present system came into existence through a wholly external view of a teacher's calling, holding that the university should give the professional knowledge, and then Providence and routine would give the ability to use it; indeed, I venture to assert that with its originators, consideration for the school was lost in the thought of the high and holy scientific flame which must first of all be kindled in the philological and realistic minds. It is otherwise now.

There is a strong desire on the part of teachers for a reform which, without detracting from the scientific character of their studies, may give them greater unity and coherence, and at the same time adapt them to the needs of the school; and there is a strong desire that the students, through a pedagogic-scientific and practical training, may be prepared for the work which is not only to be for them a subject or a combination of subjects but a vocation, and that a no mean vocation. It is to be desired that this matter might be dealt with speedily and with no considerations but such as may serve to forward the cause.*

There are, however, other difficulties, internal and external, with which the new school will have to contend. Already many are disturbed by the requirements of the plans, especially in modern languages. It is asked: Will it be possible to bring the majority of the pupils up to the goal set up, and shall we be able to count upon such superiority in the majority of the teachers that they will handle languages and methods easily and surely? Shall we be able to count upon their being equal to the far harder task of leading their pupils into the intellectual world and the social life that are set as the highest aim? Experience will be able to adapt the schemes, and the loftiness of the aim will, it is to be hoped, stimulate the faculties. But greater difficulties may be in store for the school, and from those very forces which have had their share in its establishment. The national movement, which sees in the revival of the popular tongue a sacred thought which all means must be made to serve, threatens to compel a change of law, and make the *gymnasium* pupils learn to write in both languages, a proposal which will be a hindrance in the way of pupils' perfect mastery of either of the two languages. The most extreme democratical train of thought will not be satisfied with less than the building of a *middel* school as a two years' course upon the complete *folke* school; and if such a measure is forced through without the *folke* school having attained the strength and perfection which can fit it to cope with this task—and that it cannot in a general sense do it at present, and will not be able to do it without a series of radical reforms is beyond all doubt. If such a measure is forced through it will of necessity only lead to the lowering of the higher school.

* The writer of this article has recently been requested to draw up an outline of a course of pedagogical study for secondary school teachers.

It has not been my intention to hide the difficulties when the new school's horoscope is to be cast. But *la jeunesse se flatte, et croit tout obtenir*, and we go to work in a hopeful spirit. Much will possibly fail and must be relinquished, but I believe that the fundamental principles and regulations have vitality for the future. I do not hold up our new school as a pattern for other nations; it is too closely cut out for our own special requirements, is based too completely upon our peculiar circumstances; but in any case I venture to prophesy that when in years to come we are honoured by the visit of foreign schoolmen—or women—they will then find "something to learn in Norway.*"

OTTO ANDERSEN.

* Referring to the remark of a Swedish schoolman, reported in the Dano-Norwegian pedagogic review, "Vor Ungdom," which was to the effect that in Norway there was nothing to learn in the matter of pedagogics.

APPENDIX I.

EXTRACTS FROM THE LAW OF 6TH AUGUST, 1896, RELATING TO THE HIGHER PUBLIC SCHOOLS.

SECTION I.

Relating to the Higher Public Schools (*Almenskoler*).

Cap. i.

Concerning the General Aims and Organisation of the Schools.

Section 1. The higher schools of general education are the lower secondary or intermediate (*middel*) schools and higher secondary schools (*gymnasia*).

Section 2.

- (a) The lower secondary or intermediate school is a school for children, which, building upon the elementary school, gives its pupils a complete, thorough general education, adapted to the receptivity of childhood.
- (b) The higher secondary school is a school for young people, which, on the intermediate school foundation, leads on to a complete advanced general education, which may also serve as a basis for scientific studies.

Both lower and higher secondary school shall contribute towards the religious and moral training of their pupils, and it should also be their common aim to develop the pupils both mentally and physically into competent young people.

Section 3. The curriculum of the intermediate or lower secondary school may be of varied duration, although no such school must be arranged with a curriculum of more than four years.

The curriculum of a higher secondary school extends over three years. Such a school may have one or two sides: they shall be called the linguistic-historical side and the "real" side.

In connection with the lowest class of the higher secondary school, a one-year's course may be arranged, which gives a complete education intended for special positions in practical life. A course of this description may also be established independently of a higher secondary school in connection with an intermediate school.

Section 4. In both the lower and higher secondary schools the whole course is divided into one-year classes.

Cap. ii.

Concerning the Branches of Instruction.

Section 5. In the intermediate school, instruction shall be given in the following branches: Religion, Norwegian, German, English, History, Geography, Natural Science, Arithmetic and Mathematics, Writing, Drawing, Manual Training, Drill and Singing. Instruction may also be given to girls in Domestic Economy.

Under special circumstances, singing may for the present be omitted.

Section 6. In the higher secondary schools, instruction shall be given in the following branches: Religion, Norwegian, German, English, French History, Geography, Natural Science, Mathematics, Drawing, Drill and Singing.

With the consent of the Education Department, it shall also be permissible to include Manual Training in the list of branches.

Under special circumstances, singing may for the present be omitted.

For the practical course mentioned in section 3, a separate plan of instruction will be drawn up for each locality.

Section 7. Pupils who do not belong to the Established Church may, if they so desire, be wholly or partially exempted from receiving instruction in Religion.

The head master may also, under special circumstances, exempt a pupil from studying certain branches or parts of branches.

Section 8. The aim of the instruction in the various branches in the intermediate school shall be :—

1. In *Religion*, a thorough knowledge of the main facts of Bible History, of the most important events in the history of the Church, and of the Christian instruction for children according to the evangelical Lutheran creed.
2. In *Norwegian*, that the pupils shall read clearly and with expression both the popular tongue (the *landsmaal*) and the ordinary book language, shall be able to give an account of selected pieces of the literature in both languages, and also clearly and consecutively, in correct language, write an easy essay.
3. In *German*, that the pupils shall have gone through, and be able to translate and explain a small selection of passages, be able to read aloud and translate easy unseen passages, and have attained to a certain degree of proficiency in repeating verbally, in German the substance of one of the selected studied passages read aloud to them, answer questions on it, and write the language.
4. In *English*, that the pupil shall have gone through, and be able to translate and explain a small selection of passages, to read aloud and translate unseen passages which only contain words of ordinary occurrence, have attained a certain degree of proficiency in repeating verbally, in English, the substance of a passage read aloud to them from the studied selections, be able to answer questions on it, and to write the language.
5. In *History*, a knowledge of the principal features of the world's history, more detailed with regard to that of modern times and of Norway. An acquaintance with our political system.
6. In *Geography*, outlines of geography, especially topography, with more detailed knowledge of the geography of Norway.
7. In *Natural Science* :
 - a. An acquaintance with the most remarkable animals and plants, more especially the Norwegian and those most important to man, together with the structure of the human body and the functions of its organs, and the fundamental principles of hygiene, under which is included instruction in the effects and dangers of intoxicating liquors.
 - b. A knowledge of the most important natural phenomena and the laws underlying them.
8. In *Arithmetic and Mathematics*,
 - a. A knowledge of and skill in practical Arithmetic applied to problems from daily life, including square root and the calculation of areas and volumes. Some practice in the keeping of simple accounts.
 - b. A short course in Arithmetic and Algebra, including the law of rational quantities up to and including powers, the most important facts relating to radical quantities, and easy simple equations.

- c. A short geometrical course, which includes the propositions on the similarity of triangles. Practical exercises in construction and calculation, in which are included easy exercises in the calculation of polygons and circles.
9. In *Writing*, that the pupils shall write a good and clear hand.
10. In *Drawing*, that they shall have practice in perspective drawing of simple isolated objects.
11. In *Manual Training*, that from a simple working drawing which they shall be able to execute themselves, they can make some article of daily use and of simple form; or that they shall have practice in doing the ordinary needlework of everyday life.
12. In *Drill*, by means of gymnastics suited to the age of the pupils, to promote bodily health and strength and contribute to the harmonious development of the whole person.
13. In *Singing*, by means of methodically arranged exercises to develop the voice and ear of the pupils, and give them the practical and theoretical musical training that can enable them to join in part-singing.

Section 9. The aim of the instruction in the various subjects in the higher school shall be as follows:—

1. In *Religion*, the object of the instruction shall be to lead the pupils to a deeper knowledge of Christianity, in the meantime deepening and strengthening their religious and moral life. It is endeavoured to attain the object by Bible-reading and by studying important sections of Church History and the chief points in the Christian Faith and Ethics.
2. In *Norwegian*, that the pupils shall have gone through and be able to explain a selection from the literature written in Old Norse, the popular tongue (dialect) and the ordinary book-language, and in connection herewith shall have acquired a knowledge of the historical development of our language and of the principal features of the history of its literature, and also be able to deal with in writing, in a satisfactory manner as regards matter and form, subjects suited to their age and stage of development. The papers may be written in both the popular dialect and in the ordinary book-language; but the pupils shall be given the necessary practice in writing the ordinary book-language. On the linguistic-historical side, a selection of Old Norse, about twice as long as that on the "real" side is to be gone through, as well as a selection of foreign literature in translations.
3. In *German*, that they shall have gone through and be able to translate and explain a small selection from German literature, be able to read aloud and translate unseen prose passages, and be practised in repeating orally in German the substance of a passage from the selections they have studied, and in answering questions upon it, and also in writing the language.
4. In *English*, that they shall have gone through and be able to explain a selection from English literature (a larger selection for the linguistic-historical side than in the real side), be able to read aloud and translate unseen prose passages, be practised in repeating orally in English the substance of a passage from the selections they have studied, and in answering questions upon it, and also in writing the language.
5. In *French*, that they shall have gone through and be able to explain a selection from French literature. Also for the linguistic-historical side, that they shall have some practice in repeating orally in French the substance of a passage from the selection they have studied, and also be able to read aloud and translate easy unseen prose passages.

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6. In *History*, a fair knowledge of the more prominent parts of Ancient History, Norwegian, French, German, and English History, with a more detailed study of the period since the French revolution. The political system of Norway and of other important countries. In addition, for the linguistic-historical side, a closer acquaintance with the progress of culture during the last century.
7. In *Geography*, an extensive knowledge of the more essential features of mathematical and physical geography, and a general knowledge of political geography. The economic conditions of Norway and the other large countries.
8. In *Natural Science*, a knowledge of the more important laws of Chemistry, of the development and life of plants and animals, and of the fundamental features of human physiology and hygiene. For the "real" side, an elementary acquaintance with Physics also.
9. In *Mathematics*, those portions of elementary Arithmetic, Algebra, and Geometry not treated in the intermediate school. A knowledge of the fundamental ideas of Trigonometry, and their application to the solution of plane triangles. The elements of solid geometry. Practice in construction and calculation. Also, on the "real" side, Analytical Geometry, to the extent of being able to handle it naturally without a knowledge of Higher Mathematics. Some acquaintance with the properties of integral functions.
10. In *Drawing*, dexterity in drawing and shading objects of simple form; also, on the "real" side, practice in projection (the elements of descriptive geometry).
11. In *Drill*, as in the intermediate school.
12. In *Singing*, as in the intermediate school.

Section 10. Deviations from the regulations in Sections 5, 6, 8, and 9, as to the list of branches and the aim of instruction, may be allowed by the Education Department, if the length of the school curriculum is not thereby shortened, if the list of branches is not reduced to any great extent, and if the aim of the whole instruction in respect of knowledge and efficiency is not lowered, and the leaving examinations thereby rendered easier.

With the consent of the Storting, the King can resolve that in certain higher schools Latin shall be taught for the present. Which branches, or portions of branches, pupils learning Latin shall not take up, shall be decided by subsequent regulations. In the intermediate school it will, however, with the approval of the Education Department, be allowed—with or without the addition of other branches—to omit one of the foreign languages from the list of branches, and to limit the instruction in Mathematics to a practical course of geometrical construction, and the measurements and calculations in connection therewith.

Before any such decision is made, the school staff, the governing bodies, and the Education Council shall give their opinion on the subject.

Information as to such approved deviations shall be given to the Storting in connection with the proposed estimates for the higher schools.

Section 11. More detailed regulations concerning the instruction in the intermediate and in the higher secondary school shall be given by the Education Department in a plan of instruction.

Cap. iii.

Concerning Examinations and Tests.

Section 12. The instruction of the intermediate and of the higher secondary school shall conclude with a leaving examination, at which the pupils must show that they have attained the maturity, and acquired the knowledge and efficiency which is the aim of the instruction. There shall be no examination in Religious knowledge in the higher secondary school.

c. A short geometrical course, which includes the proposition on the similarity of triangles. Practical exercises in construction and calculation, in which are included exercises in the calculation of polygons and circles.

9. In *Writing*, that the pupils shall write a good and clear hand.
10. In *Drawing*, that they shall have practice in perspective drawing of simple isolated objects.
11. In *Manual Training*, that from a simple working drawing which they shall be able to execute themselves, they can make an article of daily use and of simple form; or that they shall have practice in doing the ordinary needlework of everyday life.
12. In *Drill*, by means of gymnastics suited to the age of the pupils to promote bodily health and strength and contribute to the harmonious development of the whole person.
13. In *Singing*, by means of methodically arranged exercises to develop the voice and ear of the pupils, and give them the practical and theoretical musical training that can enable them to join in singing.

Section 9. The aim of the instruction in the various subjects in the higher school shall be as follows:—

1. In *Religion*, the object of the instruction shall be to lead the pupils to a deeper knowledge of Christianity, in the meantime deepening and strengthening their religious and moral life. It is endeavoured to attain the object by Bible-reading and by studying important sections of Church History and the chief points in the Christian Faith and Ethics.
2. In *Norwegian*, that the pupils shall have gone through and be able to explain a selection from the literature written in Old Norse, popular tongue (dialect) and the ordinary book-language, and in connection herewith shall have acquired a knowledge of the historical development of our language and of the principal features of the history of its literature, and also be able to deal with writing, in a satisfactory manner as regards matter and form, subjects suited to their age and stage of development. The pupils may be written in both the popular dialect and in the ordinary book-language; but the pupils shall be given the necessary practice in writing the ordinary book-language. On the linguistic-historical side, a selection of Old Norse, about twice as long as that on the "real" side is to be gone through, as well as a selection of foreign literature in translations.
3. In *German*, that they shall have gone through and be able to translate and explain a small selection from German literature, be able to read aloud and translate unseen prose passages, and be practised in repeating orally in German the substance of a passage from the selections they have studied, and in answering questions upon it, and also in writing the language.
4. In *English*, that they shall have gone through and be able to explain a selection from English literature (a larger selection for the linguistic-historical side than in the real side), be able to read aloud and translate unseen prose passages, be practised in repeating orally in English the substance of a passage from the selections they have studied, and in answering questions upon it, and also in writing the language.
5. In *French*, that they shall have gone through and be able to explain a selection from French literature. Also for the linguistic-historical side, that they shall have some practice in repeating orally in French the substance of a passage from the selection they have studied, and also be able to read aloud and translate easy unseen prose passages.

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On leaving the lowest class of a higher secondary school an annual examination shall be held for pupils leaving school from this class.

To what further extent annual examinations will be held shall be decided by the Education Department.

Section 13. The intermediate school leaving examination shall be called Intermediate School Examination (*Middelskole examen*) that of the higher school, *Examen Artium*.

Section 14. The leaving examinations shall be conducted by the Education Council. At the written examinations, the papers shall be set by the Council. At the *viva voce* the teachers of the school shall examine, when the Education Council do not decide otherwise.

Section 17. The "*Artium*" shall admit the pupil as a student to the University.

Cap. iv.

Concerning the Admission of Pupils.

Section 20. As general conditions for the admission of pupils, it shall be required :

1. That those who are admitted to the lowest class of an intermediate school shall not be under the age of 11 if the school has a four years' course, not under 12 if it has only a three years' course, and that those who are admitted to the lowest class of a higher secondary school shall not be under 15. Exceptions to this rule may be made in special cases by the headmaster.
2. That their age shall not be too greatly disproportioned to the average age of the class into which their acquirements may entitle them to be admitted.
3. That they shall not be suffering from infectious disease or other physical ailment that can have an injurious effect upon the other pupils.
4. That their morals shall be uncorrupted.
5. That where they have formerly been pupils of other schools, they shall show testimonials from the school which they have last attended.

Section 21. For admission to the lowest class of an intermediate school there shall be required, where the curriculum prescribes a four years' course :

That measure of knowledge and proficiency that should have been attained on leaving the upper division of a town elementary school, furnished with voluntary instruction.

If the curriculum be shorter :

A comparatively higher standard of knowledge and efficiency fixed for each school.

This shall be tested by an entrance examination.

Section 22. In order to be admitted to the lowest class of a higher secondary school, the pupil shall have passed the intermediate school examination.

Cap. v.

Concerning the Time for Instruction, and Holidays.

Section 25. The hours of daily instruction shall, as a rule, be divided into six lessons of 45 minutes each. Of these lessons, six each week, as a rule one each day, shall be devoted to Drill, Manual Training, or Singing. Between the lessons there shall be time for recreation. According to a proposition of the Teachers' Council, more detailed regulations concerning the daily school hours shall be made by the municipal governing body, with the approval of the Education Department.

Section 26. The school holidays shall amount in all to thirteen or fourteen weeks, which, according to a motion of the School Board, shall be distributed according to the more detailed decision of the governing body, but the summer holidays shall not be of less than seven weeks' duration, and the headmaster shall have power to give as many as twelve days of the school year as single holidays.

Cap. vi.

Concerning School Discipline and Order.

Section 27. In maintaining discipline and order, the school shall not only seek to remove hindrances to profitable instruction, but also contribute towards the education of the pupils to a sense of order and propriety in their whole behaviour. The teachers should therefore also pay attention to the behaviour of their pupils out of school, when the pupils are not under the supervision of parents or superiors.

Section 28. If any pupil offend against propriety or order, or show defiance or neglectful and careless conduct, reprimand or some mild punishment shall be administered. As a form of punishment may also be employed exclusion from school for a period not exceeding two months; decisions on this head shall be made by the staff meeting on the proposal of the headmaster.

Corporal punishment shall not be inflicted on girls or any pupils of higher secondary schools; whether and to what extent it may be administered at all shall be decided by the Education Department in the more detailed regulations concerning the discipline and order of the school.

Section 29. If a pupil evinces continued defiance, or in other ways such bad conduct that his example is considered dangerous, he shall be expelled from the school. Decisions in this matter shall be made by the teacher's council on the motion of the head-master, but are only valid if at least two-thirds of the members are agreed. Reports on the subject shall be made to the Education Department.

A pupil thus expelled from school cannot regain admission to a public school before the expiration of a year, and then only if, in the interim, he has shown good behaviour.

Section 30. If the parents or superiors prevent a pupil from complying with the provisions of any rule or regulation, the school staff may decide, on the proposal of the head-master, that the pupil shall be temporarily refused admission to the school. Appeal against the decision of the school staff may be made to the Education Department.

Cap. vii.

Concerning the Teachers of the School.

Section 32. The principal of a public higher (*almen*) school is called *rektor* (head-master). The other regular teachers are *overlærere* (second masters) and *adjunkter* (assistant masters).

Section 33. The regular teachers are appointed by royal decree.

No one can be appointed *adjunkt* until he has been acting as such for five years; and on the expiration of that time, he shall either have a permanent appointment or leave his situation.

The provisions of this law shall not prevent women from having the same opportunity as men of being appointed as principals and teachers.

Section 40. The head-master shall choose from among the teachers of each class a form master, who shall give the closest supervision to the pupils of his class and their work, and watch over their interests generally.

Section 41. In each school there shall be a staff meeting consisting of the head-master as chairman, and the regular teachers. The other teachers

may be summoned by the head-master, when he considers it advisable, and may then take part in the proceedings, but not vote.

Section 42. The school staff shall meet, as a rule, once a month, and as much oftener as the head-master considers necessary. In case of equality of votes the chairman shall have the casting vote.

Section 43. The school staff has to decide in cases which concern :

1. The admission of pupils.
2. The promotion of pupils. Only the teachers of the class and the head-master take part in the voting.
3. An appraisalment of the pupils' diligence, progress, and moral conduct.
4. The removal of the pupils according to Sections 28, 29, and 30.

The school staff also makes proposals for the regulations relating to the daily school hours and holidays, and to the discipline and order of the school.

Cap. viii.

Concerning the Central Authority, Education Council, and Local Governing Bodies.

Section 48. The Central Authority for the higher public (*almen*) schools is the Education Department for the time being.

Section 49. To assist the Education Department in the inspection of the schools and the arrangement of the leaving examinations, there shall be an Education Council, consisting of a chairman and six members. They are appointed by royal decree for a period of five years, and are chosen for their practical insight into the matters of higher public instruction. On all questions of hygiene the Council is joined by an expert on such matters, appointed by the King for five years.

Section 50. The Education Council shall send in an annual report to the Education Department of its proceedings and of the result of the examinations, accompanied by such remarks about the schools as it may consider necessary.

Section 52. For every higher public (*almen*) school there shall be a municipal governing body consisting of :

1. The head-master of the school.
2. One member, appointed by the Education Department for four years.
3. Three members elected by the Corporation. The provisions of the law of 14th January, 1837, relating to local governing bodies in towns, the duration of the tenure of office, the retirement, and re-election of members shall be in force with regard to these members.

Section 54. The municipal governing body shall exercise a general supervision over everything that can serve to forward the interests of the school.

It shall be incumbent on its members to gain, by visiting the school, a knowledge of its instruction, discipline, and order, and of its hygienic conditions. If any ground for complaint be found, the governing body may address the head-master on the subject, or, if necessary, the Education Department. If the complaint has reference to one of the teachers of the school, communication to the Education Department must not be made until the person charged has had an opportunity of explaining himself.

Section 56. In the supervision of Religious Instruction, the bishop, or a priest appointed by the bishop, shall take part.

Cap. ix.

Concerning School Fees, Examination Expenses, Free Places, and Scholarships.

Section 57. The amount of the school fees and the reduction made for two or more members of the same family shall be fixed separately for each school.

Section 60. Free places and scholarships shall be distributed by the Education Department acting on the recommendation of the governing body. They shall be for one year only, and fresh application must be made every year.

Section 61. Pupils shall only be entitled to free places and scholarships on the following conditions :—

1. That they show themselves deserving of such aid by their diligence, progress, and good conduct.
2. That the fact of their need is substantiated by trustworthy witnesses.

Section 62. The head-master shall see that the scholarships are employed according to his decision.

Cap. x.

Various Regulations.

Section 65. The Education Department shall see that the school premises are always maintained in accordance with the requirements of hygiene and the interests of the instruction. Every plan for additional buildings or alteration of school premises shall be laid before the Board of Health before it receives the sanction of the Education Department.

Every school shall be provided with a playground, school furniture and appliances in accordance with the decision of the Education Department.

Section 66. To maintain a constant supervision over the sanitary conditions of the school, the municipal governing body shall engage a doctor, whose duties in the service of the school shall be determined by special instructions drawn up by the Education Department.

Section 67. Each school shall, as a rule, publish an annual report.

SECTION II.

Concerning Municipal and Private Higher (*Almen*) Schools.

Section 69. The provisions in Section 1, 31, 48, 49, 56, 59, and 65—67 of the law shall also apply to the higher (*almen*) schools maintained by corporations, and supported by Government grants.

Section 70. The principals and teachers of these schools shall be appointed by the Education Department, after nomination by the School Board (*skolestyret*).*

Section 72. The right to hold leaving examinations carrying with them the same privileges as those from higher public (*almen*) schools may be granted by royal decree to private schools, or municipal schools without Government aid. The conditions for obtaining and keeping this privilege are :—

- (a) That the length of the school curriculum and the school hours are considered sufficient.

* *Skolestyret* (school-board) is the name given to a committee appointed by the municipal council, whose duty it is to superintend the *folke* school of the town.

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- (b) That the aim of the instruction in the various subjects shall be in accordance with the provisions given in Cap. II. of this law.
- (c) That the school's staff of teachers shall have, on the whole, a training such as is required of those who have appointments in the higher public (*almen*) schools.
- (d) That the teachers' salaries shall be approved by the Education Department.
- (e) That the school premises, furniture, and appliances are practical and complete.
- (f) That at least one set of pupils shall have been brought up for the leaving examination, and shall have passed it satisfactorily.
- (g) That the instruction and leaving examinations of the school shall be subjected to such inspection as the Education Department shall determine.
- (h) That a report of the work of the school shall be submitted annually to the Education Department.

APPENDIX II.

EXTRACTS FROM THE REGULATIONS FOR THE HIGHER
PUBLIC SCHOOLS.

I. Relating to the Admission and Dismissal of Pupils.

Section 1.

Every year, at least eight weeks before the entrance examination is held, the date up to which pupils can be entered, and the date of the examination in every school, shall be notified. In the notification shall be stated what particulars must be given on entering the name of a pupil.

Section 2.

The pupil's name shall be entered by his parents or guardians, verbally or in writing. It shall be accompanied by a statement of the name and station of the parents, the pupil's certificate of birth, and in the case of admission to the higher secondary school the certificate for the intermediate school examination. In entering a pupil for the lowest class of the intermediate school a certificate shall be required from a town elementary school to show that the pupil has gone through its second division, or a certificate of other previous instruction which may be supposed to correspond to this.

Section 6.

Entrance Examinations for admission to the lowest class of an intermediate school shall be undertaken by two teachers. The governors of the *folke* school of the town shall have an opportunity of choosing one of these among such teachers of the *folke* school as might be willing to act.

Section 7.

For admission to a four years' intermediate school it shall be required :

In *Religious Knowledge*, that the pupil can relate the principal Bible stories, and has acquired a fair knowledge of the events in the life of Christ, and also that he has learnt the five parts of the Catechism, and can give an account of them according to Luther's explanation, of which, however, only the first two parts need be learnt by heart ; also that he knows some hymns, among them being those for the chief church festivals.

In *Norwegian*, that the pupil can read an easy piece in narrative form distinctly and evenly, with intelligent expression and pauses, and can give

an account of its substance ; that he can show by a written test (dictation and narration) that he can write correctly words of general occurrence in easy combinations (without direct speech), and that he can write down an easy narrative that has been read aloud, all executed with neatness and distinctness. He shall be supposed to know as much grammar as naturally belongs to instruction that has such an end in view. It is thus presumed that in the course of the reading and the written exercises the pupil has acquired some knowledge of the use of punctuation, and that he can point out the chief parts of the simple sentence, and knows the most important parts of speech.

In *History*, stories from universal history, more connectedly and with greater detail in the case of the history of Norway.

In *Geography*, outlines of political geography and a knowledge of maps and the globe.

In *Natural Science*, some acquaintance with the animals most important to man, with their appearance and habits, also with the more important trees and cultivated plants of this country.

In *Arithmetic*, the first four rules, simple and compound, whole figures and decimals, not including multiplication and division with decimal figures as multiplier or divisor ; rapidity and certainty in Mental Arithmetic with small figures.

In *Writing*, skill in writing with Latin characters.

In *Drawing*, some skill in drawing simple rectilinear and curved figures.

In *Manual Training* (a) for boys, some skill in wood sloyd ; (b) for girls, some skill in knitting and in plain sewing, button-holing, and darning.

Section 9.

When an intermediate school curriculum is shorter than four years, the entrance examination shall be arranged by the Education Department with separate regulations for each school.

Section 13.

On leaving school the pupil should, if possible, give particulars as to his future destination.

II. Relating to the Order and Discipline of the School.

Section 14.

The instruction shall be distributed, according to Sections 25 and 26 of the law, over 226* and 233** working days in the year, with, as a rule, six lessons daily of 45 minutes each.

Section 15.

Between every two consecutive lessons there shall be from five to ten minutes' recreation ; but after every third lesson there ought to be at least 15 minutes' recreation.

Section 17.

In every class a register shall be kept, in which the teacher generally after every lesson shall put down marks. The manner in which pupils' marks and certificates shall be communicated to parents or guardians is determined in the case of each school separately, in its detailed provisions relating to discipline and order (L. Section 31). In each class there shall also be a day-book, in which the teachers shall enter any remarks upon the absence, diligence, order, conduct, etc., of the pupils.

Section 18.

In school the pupils shall be constantly under the supervision of the teachers. To this end the head-master shall divide the duty of inspection

* With a maximum of 139 days' holiday, i.e., 53 Sundays, "Bededag" (Day of Intercession) and Ascension Day, and 14 weeks' holidays ($6 \times 14 = 84$ days).

** With a minimum of 132 days' holiday, i.e., 52 Sundays, "Bededag" and Ascension Day, and 13 weeks' holidays ($6 \times 13 = 78$ days).

equally among the teachers, as far as possible, both during the time the pupils are assembling and in recreation time. At the end of each lesson the teacher shall be the last to leave the class, and he shall be in the classroom when the pupils come in after recreation, unless prevented by inspection duty.

It shall be seen that, on leaving school at the conclusion of the last lesson, the pupils shall immediately go away in an orderly and decorous manner.

Section 25.

If it be desired that a pupil who does not belong to the Established Church shall be entirely or partially exempted from Religious Instruction, or that a pupil, for special reasons, be exempted from instruction in certain branches or portions of branches (L., section 7), the parents or guardians must apply to the head-master of the school.

Section 26.

The pupils must not visit cafés, restaurants, or other places of public resort, unless they are accompanied by their elders. Exceptions to this rule may be made by the head-master.

They must not, without the head-master's permission, appear in public in any way, *e.g.*, in dramatic performances, concerts, gymnastic exhibitions, etc. They must not, without the head-master's permission, form associations among themselves, nor be admitted as members of other social unions. Smoking in the street or other public place is forbidden.

The pupils shall also, in their conduct both in and out of school, obey the special regulations relating to the discipline and order of the school, drawn up for each school.

Section 28.

The form of punishment which, in maintaining the discipline and order of the school, can be administered as "mild punishment" in addition to reprimand, shall be stated in the particular regulations relating to discipline and order, which shall be drawn up by the Education Department in accordance with section 31 of the law, for each individual school, on the proposal of its school staff.

Corporal punishment by caning may be inflicted by the head-master's orders on boys in the intermediate school for frequent misdeeds or serious offences. The chastisement shall be administered by the head-master or the teacher to whom he has entrusted it. On such occasions, another teacher shall also be present.

III. Relating to the Teachers.

Section 30.

Every teacher shall endeavour, to the best of his ability, to forward the work of the school for its pupils' development. He must treat them with kindness, and, especially when obliged to admonish, reprimand, or punish, maintain his composure and self-control. By thoughtfully and conscientiously carrying out the regulations relating to discipline and order, he must carefully and judiciously help his pupils in their continual progress towards intelligent, independent energy, to gain knowledge and efficiency, to combat the evil, and be confirmed in all good.

He should also watch his pupils' conduct outside the school when he has the opportunity of so doing.

Section 32.

The head-master ought to possess accurate knowledge of the attainments of his pupils and of the methods of each teacher. When he finds anything to remark upon on the latter head, he shall communicate to the teacher his suggestions on the subject. He must seek to forward intelligent collaboration by means of mutual deliberations both in the assembled staff meeting, and in meetings of the different teachers of the same class, or of the different teachers in one branch. He must also see that in no one

branch do the pupils have so much home-work as will prevent them from preparing themselves in other branches, or will unduly curtail their time for recreation.

Section 40.

All the teachers shall be bound to take their share in inspection-duty according to the head-master's apportionment: when the head-master requires it, to look after the pupils, as form-master, in one or more classes where they are reading; to take the superintendence of those scientific collections that belong to their branch of instruction; and to attend both the meetings of the whole school staff and the more circumscribed teachers' meetings, in obedience to the head-master's summons.

Section 42.

It shall be incumbent on the teachers' staff to meet at the summons of the head-master, to discuss school matters in general, the progress and attainments of the pupils, and, on the whole, whatever may serve to forward the cause of instruction and order, and also every matter concerning which the Education Department may require a statement, or the headmaster wish to hear its opinion.

IV. Relating to the Intermediate School Examination.

Section 1.

The intermediate school examination shall be held at the end of each school year, beginning on the day fixed by the Education Council.

Section 5.

For admission to examination a fee of 20 kroner (22 sh.) shall be paid. Pupils who during the last school year have had at least half free tuition, or a corresponding scholarship, shall be exempted from paying the fee.

Section 6.

The papers in the written examination shall be:

1. A paper in Norwegian, of a narrative or descriptive character. In adjudging these, it shall be partly the candidate's general intellectual development that is taken into consideration, partly his ability to handle the subject with method and clearness, in a correct grammatical form, and without faults in orthography and punctuation.
2. A German exercise. This ought to contain only words and expressions which are of frequent occurrence in plain and simple descriptions, and suitable particulars shall be given, while in other respects the exercise shall be written without any assistance. It shall show that the pupils are acquainted with the commonest words, and can confidently employ the rules of grammar.*
3. An easy English reproduction.
4. As a rule, two papers in practical calculation taken from everyday life, and one in each of the following branches:
 - (a) Arithmetic and Algebra (the questions must not require demonstration),
 - (b) Geometrical construction,
 - (c) Geometrical calculation.

Section 7.

The papers shall be set by the Education Council, and shall be sent to the schools under the Council's seal, together with a statement as to the order in which they are to be taken, on which days, and the time allowed. The papers shall be opened, each on the day fixed, by the head master of the school in the presence of the teachers.

* When a School desires it, the Education Council can arrange the reproduction of an easy German story instead of a German exercise.

While writing the papers, the candidates, who ought to sit at a suitable distance from one another, shall be under uninterrupted and sufficient supervision, arranged by the head-master, if no instructions have been given through or by the Education Council in the matter.

Section 8.

The *viva voce* examination shall embrace the following branches :

- 1, Religion ; 2, Norwegian ; 3, German ; 4, English ; 5, History ; 6, Geography ; 7, Natural Science ; 8, Arithmetic and Mathematics.

The Education Council can decide that the pupils of an intermediate school that holds the right of examination shall not be examined in every subject : but there must be examinations in at least four subjects.

Section 9.

The following are the requirements in the various branches :

In *Religious Knowledge* the pupils shall be examined

- (a) On leaving Class III., when it shall be ascertained whether the candidate has a thorough knowledge of Bible history and the Christian doctrines according to the Evangelical Lutheran Confession, to an extent determined by the text-books approved of by the Education Council. Further, his knowledge of the books of the Bible shall be tested, especially of the historical books, his expertness in finding places in the Bible, and his knowledge of Bible geography. The candidates shall also be required to know by heart at least 20 verses of the hymns indicated in the school syllabus.
- (b) On leaving Class IV. the candidate shall be tested in his knowledge of the most important events in Church History, in as far as they are given by the text-books approved of by the Education Council.

Private pupils can be examined in all the branches at the same time.

In *Norwegian*, the candidate shall be required to read clearly and with expression both the popular dialect and the ordinary book language, and to give an account of selected passages from the literature in both languages. From a selection approved of by the Education Council at least 80 pages shall be taken, of which not less than 20 pages shall be of "landsmaal" literature. The candidate shall read aloud one or two pieces of the selection, and show his ability to give an account of what he has read ; he shall be required, partly by the reading itself, partly by a free account of the piece read, or in going through it more minutely, to show that he has a thorough comprehension of its substance, and, in certain cases, its connection with the whole, and that he can give linguistic, literary-historical and other particulars within the limits given by the school syllabus.

In *German*, the candidate shall be required to have gone through about 230 pages of a selection approved of by the Education Council, of which at least 70 are taken up for examination. The candidate shall first be made to read aloud and translate an easy unseen passage. He shall next read aloud a piece from those he has taken up for examination, and repeat its substance in German. If this reproduction is satisfactory the translation may be omitted. Lastly, questions shall be put to him in German, bearing on the passage in question, its characters, situations, etc., which the pupil has to answer in German. But in addition to these, questions may also be put in Norwegian—*e.g.*, when it is desired to find out whether the pupil has a correct understanding of some thing or other in which the employment of the foreign language appears to be impracticable.

In *English*, the candidate shall be required to have gone through at least 140 pages of a selection approved of by the Education Council, of which not less than 60 pages shall be taken up for examination. The candidate shall first be made to read aloud and translate an easy unseen passage

which must contain only the most ordinary words. He shall next read aloud a piece from those he has taken up for examination, and repeat its substance in English. If this reproduction is satisfactory, the translation may be omitted. Lastly, questions shall be put to him in English bearing on the passage in question, its characters, situations, etc., which the pupil has to answer in English. But in addition to these, questions may also be put in Norwegian, *e.g.*, when it is desired to find out whether the pupil has a correct understanding of something or other in which the employment of the foreign language appears to be impracticable.

In *History*, the candidate shall be tested in his knowledge of the principal features of the world's history, more minutely in that of later times and of Norway, and on his knowledge of our civil and social organisation, all within the limits prescribed by approved text-books.

In *Geography*, the candidate shall be examined in his general knowledge of geography, especially political geography, and fuller knowledge of the geography of Norway, within the limits prescribed by approved text-books.

In *Natural Science*, the pupils shall be examined :

- (a) On leaving Class III., when the candidate shall be required to know the most remarkable animals, with their organs and habits, especially the Norwegian animals and those most important to man, and to have gathered the material gone through into a systematic survey of the animal kingdom, to the extent prescribed by the school syllabus.

The candidate shall further be required to know 50 common indigenous plants, particularly such as are important to man, and the most important foreign plants, to have some knowledge of the growth and nourishment of plants, and to know the characteristic features of about 10 families (cruciferous, umbelliferous, papilionaceous, labiate, composite plants, etc.).

The examination ought, as far as possible, to be based upon exhibited natural objects, and where there are not sufficient of these, they should be replaced by good pictures or preparations.

Every candidate should exhibit the herbarium made by himself.

- (b) On leaving Class IV., when the candidate shall be required to have some knowledge of the structure of the human body, and of the manner in which its organs act, and the fundamental features of hygiene (including instruction in the effects and dangers of intoxicating liquors); further, to have some knowledge of the most important natural phenomena, and the laws underlying them—all within the limits prescribed by approved text-books.

In *Arithmetic* and *Mathematics*, the candidate shall be examined within the limits indicated by the syllabus, to test :

- (a) His knowledge and skill in practical reckoning, applied to problems of everyday life, including reduction to unity (applied to rule of three, percentage, interest and discount), division, alligation, square root, measurement and calculation of surfaces, calculation of prisms, pyramids, cylinders, cones and spheres, and, lastly, calculation of weights. The candidate is examined specially to test his skill in mental arithmetic. The efficiency of candidates in simple book-keeping shall be judged of from the account-books they exhibit.
- (b) A knowledge of Arithmetic and Algebra according to a concise text-book which treats of rational quantities, including powers, and the most important facts about radical surds quantities, simple equations with one or more unknown quantities (only with numerical co-efficients).
- (c) A knowledge of Plane Geometry according to a concise text-book which includes propositions on the similarity of triangles, as well as skill in the ordinary and practically applicable constructions and calculations, among them being easy questions on the calculation of polygons and circles.

For candidates who, according to Section 10, third term, in Mathematics have only gone through a practical course of geometrical construction with measurements and calculations included in it, the requirements shall be limited to:

- 1) Knowledge of and skill in practical arithmetic, as stated above under letter (a).
- (2) Skill in constructing easy geometrical figures.

Section 10.

- (a) *Writing.* Every candidate has to produce a specimen of writing which, as an examination in handwriting, shall be a dictation of twelve ordinary printed lines (40 to 45 letters to the line), which is read aloud two or three times and then dictated in a time of about twelve minutes. The candidates' caligraphy shall be judged from the account-books exhibited.

The dictation shall be chosen by the head-master of the school, who also has to decide when the examination is to take place.

- (b) *Drawing.* The candidates have to make perspective drawings of isolated objects of simple form.

- (c) *Manual Training.*

1. For boys. The pupils of schools holding the right of examination shall exhibit the articles made by them during the previous year, as well as their working drawings, both accompanied by the teacher's certificate.

Private pupils shall make from a model or working drawing supplied by the Education Council an article in a fixed time, under the censor's supervision.

An examination of this kind may also be arranged by the Education Council for pupils of schools holding the right of examination.

2. For girls, when they do not choose the boy's work. The pupils of schools holding the right of examination shall exhibit work from the two preceding years' lessons, showing their skill in knitting, sewing, patching and darning, and in cutting out and making simple articles of clothing (a chemise or a pair of drawers). In the case of the last-named, a model pattern shall also be exhibited.

Private pupils shall do a piece of work specified by the Education Council in a given time, under the supervision of the censors.

An examination of this kind may also be arranged by the Education Council for pupils of schools holding the right of examination.

- (d) *Gymnastics.* For pupils of schools holding the right of examination, a certificate shall be given by the teacher, unless the Education Council decide on an examination according to a scheme forwarded.

Private pupils shall be tested in accordance with a scheme forwarded from the Education Council, as to whether they can perform correctly the desired exercises.

Section 11.

The Education Council shall appoint, for a certain number of schools, one examiner and two censors, or, if the number of candidates make it desirable, two or more pairs of censors with one deputy for each pair, for each of the written examinations (writing and drawing included), at all the schools, and one censor for each of the *via voce* examinations at each separate school.

Section 14.

Manual Training, Gymnastics, and Domestic Economy shall be examined by the teachers of those branches with or without a censor, according to the decision of the Education Council.

APPENDIX III.

EXTRACTS FROM THE INTERMEDIATE (MIDDEL) OR LOWER SECONDARY INSTRUCTION.

The new Plan of Instruction, like that of the 1st March, 1885, which has hitherto been in force, contains for each branch, besides a plan of study according to which the material is distributed over the classes of the school, remarks on the importance of the subject for the common educational aim of the teaching, and on the manner and means of instruction in that branch.

By including such remarks in the Plan of Instruction, the intention has, of course, not been to define the limits, in every particular, of what comes under the head of the aim of instruction, or to give exhaustive directions as to the paths which the teacher shall follow, and the means he shall use for realising that aim. The teacher is responsible for the teaching, and is therefore both obliged to act on his own initiative, and justified in so doing within reasonable bounds; without such freedom he will not be able to preserve pleasure and confidence in his work, and the abilities which he must possess will often be prevented from expanding and being employed in the service of instruction. The plan of instruction, taking this view of the teacher's position, seeks to throw light upon the position and importance which the separate branches or subdivisions of these branches have, according to the way in which the teaching is arranged, and thereby to lead to a comprehension of what the school, on the whole, will and can perform.

In doing this, it points to the necessary or permissible restrictions in the material, offers guidance in deciding on the kind of work that may be required of the pupils, gives hints on practical regulations for the teacher's work in his class, and suggests opinions and models for the didactic treatment of the several branches, especially their more difficult parts, where experience has shown the danger of groping experiments or mistakes to be the greatest.

In other words, the principal aim of the plan of instruction is to state what is to be considered as essential and must not be neglected; it also points to the means which experience has shown to be the most important in leading to the goal.

The plan of instruction will thus be a necessary guide to the teacher who has no experience of his own to build upon. If he follow it, and, as is the duty of every teacher, think over in advance the lesson or lessons he has to give each day, and then regularly, at the close of school, review his day's work, he will, while obtaining a deeper understanding of the instructions contained in the plan, find by experience that the rules of the plan do not forbid the teacher to exercise a certain amount of freedom in the choice of matter and the manner of procedure by which, according to his tastes and development, he feels himself best fitted to accomplish something; and that, on the other hand, these rules determine the lines within which the teacher's development ought to be going on, and prevent the one-sidedness in which an uncontrolled individual development may easily be lost.

The older teacher, too, will constantly need to occupy himself with the thoughts of which the plan treats.

In the first place, no teacher must consider himself justified, on his own authority, in departing from the plan where decided precepts are laid down. The teacher who cannot reconcile himself to some of the rules of the plan, must give reasons for his difference of opinion, and by application to the head-master of the school, try to get the rule altered by the Education Department. This, therefore, makes it necessary for every teacher to be accurately acquainted with that part of the plan of instruction which treats of his special branch.

But it is first of all as a whole—a collected statement of the substance and aim of the whole instruction—that the plan has a claim to every teacher's attentive consideration.

If the teacher has arrived at such a point in his development that his interest—which, as a rule, originally attaches to his branch—has been transmitted to his pupils, if he has come to teach them, not so much for the purpose of making them clever in his branch as of helping in their development as human beings with strong will and good working abilities—it must necessarily be of the greatest importance to him to be accurately acquainted with the whole of the instruction imparted to his pupils.

For years complaints have been heard of the multiplicity of the branches and the variety of the instruction; and no one can deny that this is one of the dangerous sides of the school system. And though there will be small likelihood hereafter of bringing the school back to the simplicity of our fathers' time—for the school always takes a form corresponding with the common development of circumstances—it is a matter of the greatest importance to do what can be done to prevent the multifarious and varied material which the instruction has to lay before the pupil from seeming to him like a quantity of detached units, but that they shall, as far as possible, form a harmonious symbol of the multifarious and varied existence in which he, too, will have to find his place. The teacher who wishes to contribute to the unity of this instruction cannot confine his attention to the branch in which he himself teaches. He will feel the need of forming for himself a general idea of the whole work which, by the teachers in the various branches, is concentrated on the pupils. Not until all the teachers in a class mutually understand one another's work can each one of them come to the consciousness of what he himself has to accomplish for the pupils, and what is attended to by others.

Unless the different teachers in a class thus work together, the special-teacher system, which can hardly be dispensed with in the higher school, is, to speak mildly, an unreliable system. If, for instance, the teachers of languages—both Norwegian and foreign—do not know one another's method they may easily pull down one another's work instead of helping to build it up. It is the same in other groups of allied branches, and not in these groups alone. Pupils who are simultaneously influenced by instruction in all groups require every separate teacher to have full comprehension of the work of instruction as a whole, so that the result of his special teaching may easily find its connection with the rest of the educative material which the pupils have to master. The object is that the pupils may consider the various things as organic links in a higher unity.

The special teacher, who will consciously work with this object in view, must of course make himself familiar with the plan of instruction in its entirety. But this is not enough; for as stated above, the plan, if it is to give the teacher's personal qualifications the necessary free scope, cannot particularise the course of instruction in such a manner that each teacher can there read for himself how the instruction in every detail is carried on or ought to be carried on. The special teacher can only obtain a true understanding of his work and its limits if conferences are held regularly* between the teachers of each class, for a more detailed discussion of the methods employed and of the choice and treatment of the material than there is opportunity for in the daily intercourse and the ordinary meetings of the school staff. Two results may thus in the main be secured; in the first place, different methods of handling the same branch are avoided—methods often so different that the pupils do not recognise the branch as the same; but the chief point is that in this way every teacher will know what, as the result of previous teaching, he can count upon as material and support for his own teaching, and he will also see clearly what he has to prepare for the use of others.

The head-master of every school ought thus to see that teachers' conferences are held by classes, and it can scarcely be doubted that they will

* For instance, every quarter, when each teacher has entered in the lesson-register his not too concise account of what has been gone through in the quarter just concluded.

prove of benefit to the pupils' development. It always awakens the pupil's interest when he notices that what he has learnt is made use of. But in this direction much more can, of course, be accomplished when the various teachers of one pupil work together with clear understanding than when each teacher, to the best of his ability, works upon him in his own branch without knowing much of what the others are doing.

This can be illustrated by a single example. If there are different teachers in the branches Arithmetic and Mathematics, Natural Science and Sloyd, they could arrange matters when they worked together in the following manner: The Sloyd teacher, having been informed that his pupils would soon be taught about the lever, would let each of them have ready a simple lever apparatus in time; and the teacher of Mathematics, when the teacher of Physics had gone through the subject, might take from it material for arithmetical problems and equations. These three teachers could hardly spend time and labour in a manner more profitable for their pupils, and the small irregularities in the course of the instruction which might now and then be necessitated ought not to be any hindrance. The plan is ample in its construction, also because the instruction is to be for the sake of the pupil, not of the branch.

If collaboration between the various special teachers in one class be called forth and strengthened in the above manner, exaggerated tendency on the part of the teachers to require their employment in only one branch is also thereby counteracted. If there is collaboration of this kind in the school, many a teacher will naturally feel a desire and power to employ and extend his knowledge in several domains in order to learn to know his pupils, and work upon them from other sides.

It is desirable that the special teachers should have the opportunity of accompanying their class as far as they are in any way competent to do so. Various circumstances may, however, combine to render this impossible. Not only where this is the case, but also where the intention can be carried out to a desirable extent, it is of essential importance that those special teachers who teach the same branch throughout the whole school should fully understand each other's methods. The head-master ought therefore, in addition to the above-named class-teachers' conferences, to see that at the special teachers' conferences it is made quite clear how the instruction in that branch is to be given, from the class in which the branch is introduced until its conclusion.

Where the importance of interaction between the various branches and the various teachers is recognised in act, it will also be recognised that the mother-tongue is a common subject, for whose care and fostering in speech and writing* all the teachers are responsible.

It will help and ensure a teacher's development in the school if, from the first time he stands before a class, he lay to heart that in whatever branch a teacher instructs, it is his duty to take great trouble to accustom his pupils to speak distinctly, straightforwardly, correctly, and in correctly-formed sentences. He must help the pupils to repeat what they are to master in a satisfactory manner, and he must increase his requirements in this repetition, with the pupils' advance in age and development. It is here important to remember two things—first, that the teacher, in this as in other respects, in order that he may have any claim on his pupils, must set them such a good example that he is a model for them; and, next, he must be careful not to talk too much himself. If a teacher, in order to get through the lessons of the day or class, is tempted to be the chief speaker, and to be content if the pupil now and then puts in a word or two, there is good reason for him to look carefully whether there is really anything that obliges him to race through the matter in this manner, whether there may not perhaps be deficiencies in his own *preparation* which make it appear so; for good treatment of the matter of instruction is not possible without good preparation, partly preparation for each lesson, partly pre-

* Written answers for practice in accuracy in thought and expression, are also a part of all teaching, even if there be no written examination in the same.

paration of larger sections. Before beginning the work of a year, it must be surveyed in its entirety, and divided up judiciously, and then a calculation made of what it is thought can be accomplished, *e.g.*, every month or every quarter. Many circumstances may disturb a plan of this kind, and in the course of the work reason will frequently be found for making alterations in it, but it will always be a standard for reference, and a help in reaping the results of the preparation for each lesson, and in doing the work without undue haste.

Norwegian.

The first and foremost requirement for good reading is that every sound be articulated correctly. Here, of course, the preliminary work must have been done before, but there will always be many pupils who still need guidance. But such guidance, it must be noted, should be given quite as much when the pupils talk as when they read. On the whole, it must be remembered that whatever can be done for certainty and correctness in speaking will also benefit the reading*; for it is a requisite of good reading that the pronunciation is according to the "refined spoken language," the same pronunciation which is the usual careful but unaffected speech of educated people in all parts of the country. The pupils must know the difference between the sound of speech and its written symbol (this is also practised in the written exercises), and attention to the pupils' speech will be a necessary condition for the attainment of good and natural reading. On several points there will be different opinions as to what belongs to the "refined language" and to the "current pronunciation"; but in one school one method should be agreed upon, and all the teachers ought to know and respect the accepted one in their work of accustoming the pupils to speak correctly. Where several modes of pronunciation are used in the refined speech of the place, the one that is most *Norwegian* is of course to be preferred; but here there are several considerations to be thought of. Care must be taken not to anticipate the course of development, and there will be several modes of pronunciation which may indeed be allowed, but must not be enforced. On the whole, caution must be practised in correcting the habitual pronunciation of any pupil; he must not be disheartened by having his pronunciation made ridiculous before the class, and in doubtful cases the pronunciation that the pupil is accustomed to at home must be respected.

Another quality of good reading is that the pupil reads with confidence, without hesitation, without stammering interruptions, and not filling the pauses with voice-sound only, or with inarticulate sounds. In order to attain such confidence, it is of great importance that the pupils learn to read more or less slowly according to requirement, and that they learn to pause in the right places—partly where pauses *must* be made, because the meaning requires it, partly where pauses *may* be made for the sake of taking breath. Constant practice is still required in this, with the object of making the scholar acquire such a command over his delivery that he can freely moderate his speed in reading according to the subject and form of what he is reading (poetry should, as a rule, be read more slowly than prose), and that he not only understands and knows that he must pause where the meaning requires it, but also, without breaking the continuity of what he is reading, he may pause more where he himself chooses—*e.g.*, to emphasise a single sentence, or to take breath in cases where this does not naturally take place in a necessary pause.

While special emphasis is laid, during the first stage, on practising *distinct* and *confident* reading, in the higher stages greater stress is by degrees laid on reading *with expression*. But confidence will continue to be a chief requirement through all classes; practice in confident reading, too, will, when precision of speech is made the first requisite, of itself become practice in natural reading, and the pupil is thereby on the right road to attain the second requirement of the law—the power of reading

* On the subject of the importance of correct speech to the power of expressing one's self in writing, cf. below.

with expression. Expressive reading should be just *natural* reading, and not recitation, so unnatural for a child. What is specially required is that the pupil shall have so much command over his voice that he can to some extent vary the expression according to the subject—the principal thought and interpolated subordinate thoughts, narration and dialogue, etc., etc.

The piece that is given for home study ought to be gone through in advance in the lowest stage as much as possible, with the object of giving the pupils the opportunity of practising themselves in reading aloud unknown matter. While going over it, the teacher makes sure that the pupils understand the subject and the context. He explains unknown and difficult words, as far as possible connecting them with familiar words of the same root or with familiar synonyms, whereby both the similarity and the difference are pointed out. The piece that the pupil has had as a home lesson must be read with due slowness, loudly and distinctly, with the right inflexion and the right emphasis, and pausing in the right places. The subject is made into a theme of conversation, and the pupil relates what he has read. Care is taken that the reading is not too quick, and not performed in a slovenly manner, and that it is retold in correct language and in properly-formed sentences. In order to make sure that the pupils work upon their reading-lesson at home, they ought now and then to be made to tell the contents of the piece before opening their books.

In the higher stages, the preliminary perusal is restricted to the most necessary explanations and definitions; during the reading and the pupils' repetition of the substance and train of thought, there will be opportunity of giving such further explanation as may prove to be necessary for complete understanding and mastering. When a natural opportunity is afforded by the reading, attention is also drawn to figures of speech, and peculiar expressions and terms, as for instance personification, climax, and irony, are explained; but the study of tropes and figures must not be entered upon as an independent branch. As before, the teacher ascertains whether the pupils work at home with their reading, and he tests this particularly to make them understand how necessary careful preparation is for expressive reading.

With regard to reading in the *landsmaal*, the law sets up the same aim as for reading in the ordinary book-language, namely, that the reading shall be distinct and expressive. Here, as a rule, a special perusal will be required both for the sake of the reading and of the understanding, and where necessary for full comprehension, passages must be translated. The passage read is talked about, and the substance repeated as in the other reading matter.

A suitable selection of poems (in book-language and popular dialect) is learned by heart in all classes; the poems are read and gone through in advance, and attention is called to the rhythm, in the first stage only to rising and falling rhythm in a general way; in the third and fourth classes the ordinary metrical feet are studied. A poem ought to be fully understood before it is learnt by heart; spoiling the impression of the poem by interruptions during repetition is thereby avoided. It ought to be a rule that the pupil who is to repeat a poem, or part of a poem, stands up in front of the class.

The *kinds of poetry* are explained by the examples given in the reading material; the principal division into epic, lyric, and dramatic poetry is briefly explained.

History of literature is not read from any special text-book, but a survey of the course of its development is given in connection with what the historical text-book relates about it.

Written exercises.—In the lowest class, work of the same kind as was tested in the entrance examination is continued. Practice in re-production is nearly related to speech, and the more the pupils are required to give complete answers, and on the whole speak correctly and in rightly-formed sentences, the easier will the written exercises be, as it will only be expressing in writing what is natural to them to express verbally. The matter for such exercises may be taken from easy stories which have been read with full comprehension, or which are well known; for instance, from the history teaching or from easy descriptions from natural history (associated with

pictures of animals). First a short account of the main substance is put, in class, into a fixed form, which, at any rate in the earliest stage, may be written step by step upon the black-board; the board may then be turned, and the pupils exercised in repeating orally the substance in the fixed form; and, lastly, they may be made to write down the whole, either at school, if there is time for it, or as home work. Such work, at school or at home, will be quite easy for some, but is rather difficult for others; for the latter it will be advisable to have two books, a note-book for the first attempt and an exercise-book for copying it into. Writing on the board can probably soon be dropped in the lowest class of the four year intermediate school; but preparation of the written repetition ought to be continued for a time, so that the pupils may accustom themselves to keep to the principal thought, and to say first what is to be written afterwards, whether as school work or as home work. As preparation for more independent work, the pupils may be allowed to prepare themselves by giving a short account of a certain passage, first verbally at school, and then in writing at school or at home, and lastly they may be made to repeat a story in writing at home by themselves. During these exercises there will be constant opportunity of explaining the meaning of the punctuation signs, and by degrees the pupils will be required to put them in for themselves. There will be constant opportunity of remarking on the difference between the spoken sound and its written symbol, and to speak of synonyms where there is question of the best choice of words. The exercises will aid on the whole in developing the pupils' linguistic sense; but they will also have great significance in another way; the pupils will learn through them to see what is most important in familiar matter, that which gives coherence to the whole, and in this manner will become accustomed to require clear coherence in what they themselves write.

In the upper classes, exercises like those given at the leaving examination are written, at first after careful preparation and guidance at school, afterwards more freely. The greatest stress is laid upon the requirement that the pupils shall write a correct and natural language, and that they can maintain a decided coherence; without previous instruction, they must not be set to write about a subject of which they cannot be supposed to know anything already. Essay subjects from History, Geography, and Natural History, connected with the tasks in these branches, may be given by the Norwegian teacher, in which case he must obtain exact information as to what the pupils have previously learnt on the subject, and, as a rule, consult their teachers. In the upper classes, it may be serviceable to exercise the linguistic sense of the pupils now and then by letting them translate a piece from German or English; here, too, are included exercises with special bearing on practical life, such as composition of letters, applications and short communications, advertisements, etc.

Foreign Languages.

German and *English* shall be learnt in the intermediate school.

The aim of the instruction in *German* is "that the pupils shall have gone through and can translate and explain a small selection of passages, can read aloud and translate easy unseen passages, and have some proficiency in repeating orally, in German, the substance of one of the selected passages they have studied, can answer questions upon it, and can write the language."

The aim of the instruction in *English* is "that the pupils shall have gone through, and can translate and explain a small selection of passages, can read aloud and translate unseen passages which only contain words of ordinary occurrence, have some proficiency in repeating orally, in English, the substance of a passage from the selection they have studied, can answer questions on it, and can write the language."

If this aim be compared with that of previous regulations, it will be seen that the law has now extended the aim. As before, pupils are to acquire such an acquaintance with the linguistic materials most frequently employed, that they can translate easy unseen passages, but they are also

to have so far made the language their own that they can to some small extent use it *orally*. Lastly, it is presupposed that the pupils shall have gained a corresponding ability to use the language in writing, although the aim here is not fixed in detail. The preparatory work of the law shows, however, that the aim is another than the hitherto usual exercise, its place being taken by more or less free reproduction, which in its turn, in a higher stage, becomes a more or less free production in the foreign language.

Thus both a comprehension of the language and a certain degree of dexterity in using it are required, and as almost the same demands are made in the teaching of both the languages with which the intermediate school is to occupy itself, this is the place to make some general remarks on the new instruction in languages, and state the means by which the attainment of the new, wider aim is to be attempted.

Although some progress has of late years been made towards the new end, the teaching has on the whole been determined by the older aim—to read the foreign language with grammatical comprehension. "*Exercises*" were also required, ability to translate from the mother-tongue into the foreign language; but so far as the intention that the language should be used in writing was concerned, the aim was missed. What was gained was a certain skill in reading, but the written test showed that as a rule the pupils were unacquainted with the language. The reason of this has been sought in the method, as being one-sidedly theoretical; too much was learnt about the language, too little of the language itself. This older method, which is characterised as the artificial or constructive, has therefore gradually been left for another, which, in contradistinction to the former, is called the natural or imitative; but on account of the older regulations with regard to languages in our schools, it has been impossible to carry out the new method in such a way that the support of trustworthy experience can be adduced in its favour. Therefore, where the law does not set up fixed aims, it will be necessary to feel one's way forward, set up temporary aims, and above all accommodate the method to one's previously made conclusions as to its applicability, and also to the conditions under which instruction must be given in a period of transition.

The chief difference between the older and the newer method is in the manner in which a knowledge of the foreign language is to be acquired and appropriated, so that both proficiency in reading and ability to use the language verbally and in writing may be attained.

Whereas, according to the old method, the written language is made the foundation, and is mastered by means of translation into the mother-tongue, the new method requires the foreign language to be learnt principally by means of itself, without Norwegian as the connecting link. The mode of procedure is as follows: The teacher begins by translating the text for the pupils, but this translation is gradually and rather early left off. Instead of translating the words, the teacher illustrates the meaning of them by showing the thing that they describe, or its picture, or he leads the pupil to an understanding of them by pointing out a relationship with already familiar words, or the word is explained by circumlocution in the foreign language, as is done in explaining Norwegian, which must also explain itself. The intention of this is to merge the foreign expression in the pupil's mind into the object for which it is the expression, as is done in the earliest attempts at acquiring language.

How far translation can be rendered superfluous or be superseded by these means is not yet determined, however; in many cases employment may be made of pictures, circumlocutions, etc.; but, at any rate, these means do not suffice in the case of subtler expressions for thought, abstract ideas, and idiomatic expressions in a special sense. For the present, it must be taken for granted that translation into Norwegian is necessary to a far greater extent than the new method presupposes. Here, as elsewhere, the school must combat vague descriptions and semi-comprehension; but the foreign expression is first understood to the same extent as one succeeds in finding the Norwegian expression which covers it. Translation is a necessary means of testing the comprehension; the law presupposes this skill, and it is not attained without practice. In the plan of instruction drawn up below, therefore, translation is maintained to be an impor-

tant and necessary exercise throughout the course. On the other hand, it is of the highest importance that the pupil accustom himself to understand the language directly and without other intervention. This is the condition for linguistic skill in reading no less than ability to speak and write in the foreign language. The teacher should, therefore, at a more advanced stage, and with very easy passages, try now and then to do without translation, and instead of it make use of explanation or free rendering in the foreign language. An important means of improving in reading is cursory reading in the foreign language at home.

The requirements of the law upon the second point are "*some proficiency in repeating the substance of a passage from the selected studied passages, and in answering questions upon it.*" It must be maintained that this does not refer to skill in speaking, if the latter consists in being able to put one's thoughts into the foreign language offhand. This means neither more nor less than that the pupil shall think in the foreign language; but it need hardly be said that this is only very imperfectly attained at a school whose highest aim is to teach the young to think in their native tongue, and find in it the right expression for their thought. The aim which the law sets up with regard to skill in speaking is also more restricted, and for this the above-named treatment of the reading passage will prove to be the school's most serviceable means. The verbal use of the foreign language has hitherto, as a rule, been neglected or set on one side in our schools. There were plenty of reading exercises, but very little exercise in hearing and speaking; the pupils have had only a little practice in comprehending what was read or related, a verbal communication, address or question, and in replying to them. *Dictation* has been a kind of ear-practice, and it will continue to be employed with the double purpose of accustoming the ear to recognise the word in its phonetic form, and of rendering it in its accepted written form, the usual orthography. But to this must now be added *oral* exercises of various kinds, with the object of making the pupils more familiar with the foreign language, and intended as far as possible to help in the direct acquisition of it. The above-named *exercises in reproduction* are to aid in this; they will be employed in addition to the dictation, and are not to take its place.

The teacher must always be free to use Norwegian, both when it is a question of more detailed explanation and in the case of serious admonition and reprimand.

The new method will only have grammar used when it lightens the pupil's work in acquiring the language. This so far agrees with the method in practice that grammar, in the present system of teaching languages, is subservient—the means, not the end. It has, however, its fixed use, and the school, which must teach accuracy in every point, must also require it in the grammatical understanding of the language. *How* this understanding is best gained is another matter. According to the new method, it comes most naturally during reading, when the pupil, with the teacher's help, is guided in gradually finding out the laws of the language from what he is reading; not until later, for repetition, may a systematic text-book be used. The correctness of this principle may be recognised, but to what extent it ought to be acted upon will depend upon practical considerations. Partly to save time, partly because the material is not always sufficient, it will be best to collect and arrange the material beforehand, according to the categories which ought properly to be made out first. The chief thing will be that the grammatical rule is illustrated and practised in an intelligent manner, the example preceding the rule. Teachers are recommended to use grammars that confine themselves to the representation of the laws of the language in their broader features, while acquaintance with the subtler features and the more arbitrary regulations are acquired by and during reading.

It is seen from the above that the selection of passages for reading forms the foundation of the whole teaching; all exercises in reading, speaking, and writing are connected with them. It is therefore of the greatest importance that they are adapted to their purpose. In the intermediate school, it is above all the language as language that is to be learnt, *the simple language in daily use*. This is what the selection must represent

The use to be made of it, the care with which it is to be acquired, presuppose also that the contents must be such as are worthy of being read in such a manner. The selection must be a model one, both in form and contents, and be able to contribute towards the general education. It will be an advantage if it can be connected with what the pupil already knows, can elucidate it, and especially enlarge his knowledge of the land and people in question; but the chief thing is that the account is simple and natural, and the matter pleasant and easily understood, without much explanation, by pupils of the age of those in the intermediate school. Stories and descriptions from human life, history and nature should form the main part of the selection.

History.

As a general rule, the pupil ought first to be made acquainted with the matter of instruction by means of verbal accounts by the teacher, who must train himself to relate well and vividly. At the beginning of the lesson he relates, in close adherence to the class-book, the task that is to be given for home study for the following lesson. In connection with this he tries to facilitate a certain acquirement by *explaining unfamiliar words and expressions*, and gives the right *pronunciation* of names; the *train of thought and the coherence* is explained when necessary; the *points* to which special attention is to be paid are *emphasised*, and previously-mentioned past or present *circumstances*, which it is necessary to recollect, are *recalled*.

The perusal must be adapted to the pupils' stage of development, and also accommodated to the time at disposal. Out of a lesson of 45 minutes from 10 to 15 are employed in going through the lesson in this way. In the lower classes this embraces *all details*; at a higher stage it may to some extent be advisable to confine the coherent account to chief points. In the upper classes it will generally be advisable, especially during the repetition of what has been read in the two lower classes, first to give a general survey.

After going through the new lesson the pupils are examined in the lesson they have prepared for the day. Care is taken in this examination that the questions are put in such a manner that the pupils have an opportunity of *replying in continuous narrative*, or (where the matter is more difficult or the subject argumentative) in giving a *full and coherent answer*. The teacher must *not interrupt* to give explanations or supplementary questions. Only when the pupil comes to a standstill, and has nothing to say, must the teacher step in to assist him.

When the pupils, through questioning, have given an account of the lesson for the day in its entirety, the teacher *talks* with the class about it, seeking by means of short questions to *give prominence* to the most important points, to *correct* what is vague, *supplement* what is incomplete, and assure himself that both in the main and in detail it has been *correctly understood*. Then the lesson for the previous day is again taken up, for it ought to be a rule that the pupils are not only prepared in the new lesson, but also in the old one. Opportunity must be given to as many pupils as possible to take a personal share, and the teaching must be bright and lively, so that all can follow.*

At suitable places, and in the degree permitted by circumstances, the teacher gives supplementary detailed narratives of historical events, conditions, and personages. The pupils are thereby encouraged to take an interest in historical reading. The historical pictures that the school owns are used in all stages of the school to illustrate the narrative. The narrative should be given extempore; reading only in case of need.

In order to make sure of getting through the year's course in the right manner, the teacher ought to plan out at the beginning of the school year

* It may seem natural to begin the class with the day's lesson, and end with the perusal of the next. Experience shows, however, that in that way, it often happens that there is no time left for a satisfactory perusal. But if there is a certainty of sufficient attention, there is naturally nothing to prevent the perusal being taken last.

how he will work throughout the year, how far he intends to go, what narratives he will give, and at what points. Many circumstances may, indeed, interfere with a plan, but it will always serve as a standard and a reminder.

Geography.

A considerable amount of topographical knowledge is required in daily life. The pupils ought therefore, at the conclusion of the curriculum, to have certainly acquired the knowledge of the world in a class-book adapted to their stage of development, and to have lessons given to geography.

But if the pupils' work in geography is not to be a mere heaping-up of names, figures, and facts, the teaching must be such that whenever there is an opportunity of doing so, to seek to make that which is important to them. By demonstrating the connection, for instance, between the nature and colonisation of a country, and the social conditions of its population—by comparison and contrast of circumstances in this world develop with a certain law. It must not be expected that it is mainly by means of the class-book that such knowledge is to be acquired. The class-book must be used to give a well-arranged statement of that which is to be learned. Without being reduced to a tabular list of facts and names, it must be put together with a certain conciseness; for it ought to be such that it gives to the pupils' geographic knowledge life and interest. On the one hand, by means of what the teacher imparts for the study of the matter, and on the other hand by the way in which the teacher and pupil collaborate carefully.

The most effectual means of avoiding a fruitless labour is the use of the map. Where this can give the necessary information, the book should be worded as shortly as possible.

The map must be studied thoroughly with the object of enabling the pupil the power of bringing it before his mind's eye. For this purpose the teacher must see that the pupils have access to the wall-maps, and with the atlas approved by the school management, which each of them has in his possession. In school lessons, the pupils ought to have their maps in front of them when a new subject is introduced, and the teacher must see that they follow on the map.

The pupils ought to learn to know the pictures of the world in the mind of the outline and boundaries of the countries, of the oceans, of the mountain ranges, valleys, and river courses; from the map, too, they must gain a knowledge of how the frontiers and population stand in relation to the nature of the earth's surface. The pupils ought also to learn to find on the map such details as well-known towns on the same parallel of latitude (same length of day), or under the same meridian (same time of day), the situation of geographical places (especially towns) in relation to the capital of the country, or to the boundaries of the adjoining country, countries with corresponding natural situation and character (correspondence in climate and trade), countries of about the same size (here graphic representations, etc., will be very serviceable). Lastly, the ways of communication between different places on the earth ought to be frequently pointed out.

Map-drawing ought to be used both for strengthening and testing the knowledge of the map. It must, however, be remembered that what is required is not to produce really serviceable maps, but only to embody and correct previously gained images. To represent the whole outline of the country by the aid of more or less artificial figures of memory is not of much use. The task is as a rule too hard, and the mark is overshoot, when the memory is burdened with a geometrical figure, instead of strengthening the immediate representation of the outline of the country itself. If, however, it is wished that the pupils should draw outlines by the help of lines and points, these ought to be chosen as much as possible naturally, as, for instance, certain central parallels of latitude and longitude, equal distances being marked off to points on or near the outline of the country. This

leads at the same time to an acquirement of a certain geographical knowledge, while other mnemonic figures, as a rule, are of importance only for the mechanical work, and on account of their often complicated nature, will soon vanish from the memory. Map-drawing can be employed with the best results in the fixing of topographical details in the memory, and here much time will be saved by giving round printed or hectographed outlines for filling in, either as home-work, carefully done, or from memory, in class. As practical object-matter in teaching geography may be recommended, besides the globe and maps, plates and photographs representing specially interesting landscapes, famous buildings, scenes from life, types of nationalities, etc.

With regard to the order which ought to be followed in the treatment of the material, it is undoubtedly best to begin with our own country. In the lowest class, however, the geography of Norway cannot be finished. The development of the pupils is too little advanced, and their stock of geographical ideas too small. It must be the conscious aim of the instruction to expand and fix these ideas, and this is best done, after having marked the most important points in the first studying of Norway's geography, by turning the attention outwards to other lands and to foreign conditions, always comparing the unknown and foreign conditions at home. This, on account of the quantity of the material, demands a strict economy, which is again conditional on the employment of the best opportunity for every purpose. If, for instance, by comparing the natural conditions in Norway and Switzerland, the pupils have received a sufficiently clear idea of what a mountainous country is, this is subsequently used as a complete conception, that need not be dwelt long upon in the future. The conception of coast and inland climate may be gained by comparing the climatic conditions on the west coast of Norway and in Russia. And in this way the fundamental geographical ideas must systematically be given fulness and substance, and then made use of. More is attained by thoroughly entering upon the matter in this way, at a convenient opportunity, and afterwards referring to it, than by spreading the work evenly—and thinly—over the whole course.

Natural History.

While seeking, by means of the instruction, to bring the pupil on to the goal fixed by the law for Natural History, the desire should be to awaken and strengthen his powers of observation and interest in nature, and also to develop his ability to give a correct account of what he observes, and to train him in the drawing of conclusions from his observations.

The method of instruction is the immediate consequence of this. A natural object, a living plant*, a stuffed animal, or, in default of this, a good picture, is placed before the pupil; at a later stage, a skull, a complete skeleton, and so forth.

The pupil is made to explain what he sees, his manner of expressing himself is corrected, and he is aided in discovering what he has overlooked, and finally in drawing the right conclusions from his observations.

When a sufficient number of types have been gone through, and the pupil has thus become familiar with the terminology, the teacher passes on to the comparison of nearly-allied forms. This will gradually lead to a recognition of the fact that for the sake of the general view, it will be necessary to set up a system.

In studying the natural history of the vegetable kingdom, the pupils, as early as the first class, must be instructed in the way to press and preserve plants; while a school herbarium, as a rule, will prove to be of very small pedagogic value†, it is a very different matter with a collection that has been made from first to last by the pupil himself.

Collecting and naming of plants in the holidays ought to be encouraged.

* Every pupil in the class must have a specimen of the plant in front of him.

† A school collection of typical fruit-forms would be useful.

At the final examination the pupil ought to be able to show a herbarium made by himself, embracing about fifty typical and commonly occurring species.*

While the pupil is trained to observe, attempts should also be made to awaken a love of nature in him; he must feel that he has duties and responsibilities towards living creatures; he must be brought to see that it is cruel and base to rob birds of their eggs, or impale living insects on needles, to destroy trees, etc., and that his energy and desire to observe will be able to find a nobler field in hatching butterflies, making simple attempts at cultivating from seeds, and so forth.

Physics.

The instruction in Physics must also be given by means of observation, and the subject has this advantage, namely, that what is observed is phenomena that occur. The phenomenon in progress more easily engrosses the interest than unalterable natural objects; and the interest in the physical phenomena will be heightened in a degree corresponding with the opportunity which is afforded the pupil of experimenting with them himself.

The natural course of instruction will be as follows:—

First, the experiment is performed, and this is done by the pupil himself, under the teacher's guidance, as often as there is an opportunity for it. The teacher states the consecutive order of the manipulations performed, and the ensuing phenomenon: from these he is led to deduce laws, which he can and must require to be expressed with absolute correctness. Lastly, he explains the apparatus employed, by a drawing on the black-board in cases where this can be done. Not until the experiment has thus been performed and explained are the pupils given their lessons to learn in an authorised text-book, which, in order to aid their memory during repetition, must contain plates and descriptions of the apparatus, explanations of the phenomena, and the formulation of laws.

Mathematics.

In the second half-year in the second class, theoretical instruction in arithmetic, algebra and geometry shall be begun. At this stage, the pupils will have acquired, through their study of practical arithmetic, and the preliminary geometrical exercises, the necessary qualifications to follow an exact account of the elements of mathematics, provided—be it observed—that the account is straightforward and natural, and only occupies itself with what belongs to the mathematical reasoning structure, and does not obscure natural conceptions, and foster captious scepticism, by elaborate proofs of what good common sense expects everyone to know. False steps in the direction here referred to are, however, no longer common here.

Demonstration belongs inseparably to the mathematical instruction in the intermediate school, at any rate since the new arrangement, as that portion of mathematics gone through in the intermediate school is not taken up again in the higher secondary school. The demonstrations must possess perfect clearness and incontrovertibility. But it must always be remembered that the mathematical proofs are there for the sake of the propositions, are to serve the purpose of fixing their substance in the memory, of strengthening the recognition of them, and of elucidating their more or less comprehensive applicability. If, by means of the demonstrations, no more active appropriation of the substance of the propositions, or greater confidence in their application is gained, mathematical demonstration will be only playing with chains of reasoning, which may indeed be formatively developing, but is lacking in reality. The demonstration ought therefore always to be as simple and straightforward as possible. The teacher ought not to treat the demonstration as something the pupils only have to learn by heart. They ought rather to learn that they already have the thoughts used in the demonstration; it is only a matter of using them in the right

* The herbarium ought not to contain exclusively herbaceous plants, but also pressed leaves and flowers of common trees and shrubs. In the choice of species special regard should be paid to the aim set by the law.

way. They ought therefore often to be called upon to work with the teacher when he is giving a new demonstration.

Where the pupils can find their own way they should be allowed to do so; in scarcely any other domain is the heuristic method so applicable, so productive of interest and self-dependence, and so effective in reducing the amount of home-work.

Domestic Economy.

Domestic economy is rather a wide field. First, everything under the head of needlework must be excepted, as this forms a subject by itself. What is then most feasible in an intermediate school is the preparation of food, and certain points of household economy in connection with it, such as housekeeping accounts, heating, ventilation, etc. It will easily be seen that this branch often encroaches on other branches of the school curriculum, such as hygiene, physics and the small amount of chemistry connected with it (burning), zoology (human being), and botany (many of the nutritious substances). This contact with so many other subjects affords the most welcome opportunity of appealing to the pupil's desire and ability to make use of these sciences; and the importance of this may just lie in the fact that it is in the service of another branch, and will generally be with another teacher that this happens. Their independent energy is appealed to all the more strongly. It follows from the above, that the teacher in domestic economy must have the necessary acquaintance with all the above-named branches.

The chief object of the instruction in domestic economy ought to be to teach the pupils rational and economical cooking. It ought therefore principally to embrace only the preparation of ordinary, good, every-day fare. No great amount of theoretical matter, chemical and physiological, should enter the field. The teacher ought principally to content herself with making use of, and when necessary supplementing, to some extent, what the girls have already been taught, or are being taught in the above-named branches. She must thus always keep herself informed as to how far the pupils have got in them. A little about the importance of nutritious substances for the nourishment of the body, their nutritive value, and their occurrence in the most ordinary articles of food must of course be included, but only as the pupils learn to know these articles of food in the course of their practical work. With the many good means of illustration at disposal, this will be by no means difficult. Both good plates, prepared for school use, and very simple experiments may here be employed. The pupils ought also to have an opportunity of seeing samples of different kinds of ordinary articles of food and drink, which may be kept in small glasses, *e.g.*, different sorts of coffee, tea, sugar, beans, peas, flour, spice, etc., all marked with the current prices. As other means of illustration may be named plates showing the way of cutting up animals (cow, calf, sheep, pig), both by a sketch of the whole animal with a statement of the quality, and (what, however, is less important) by pictures of the different pieces, with a statement of the most ordinary and practical uses. The teacher should also, now and then give the pupils an opportunity of seeing an animal cut up at a butcher's, and of assisting in the purchase of meat.

APPENDIX IV.

PLAN OF INSTRUCTION IN THE HIGHER SECONDARY SCHOOLS.

As a supplement to my previous account of the new laws and regulations concerning the Higher School in Norway, I venture to make the following additions :—

From the autumn of 1900, the instruction in the Higher Secondary Schools (*gymnasia*) will be arranged according to the law of the 27th July, 1896. On the 5th December, 1899, the Department issued new curricula and courses of instruction, drawn up by the Council of Education, after the opinions of the schools upon various points had been heard.

The new plan of instruction fixes the time table division of lessons for the various sides as follows :—

TIME-TABLE.

A = "real" side. B = linguistic-historical side. C = linguistic-historical side with Latin.

Side . . .	A.			B.			C.		
Class . . .	I.	II.	III.	I.	II.	III.	I.	II.	III.
Religion . .	1	1	2	1	1	2	1	1	2
Norwegian . .	4	5	4	4	6	5	4	5	4
German . . .	3	3	3	3	3	3	3	3	3
English . . .	4	2	2	4	7	7	4	2	2
French . . .	4	2	2	4	4	3	4	5	—
Latin	—	—	—	—	—	—	—	7	11
History . . .	3	3	3	3	5	5	3	3	3
Geography . .	1	1	2	1	1	2	1	1	2
Natural Science	4	5	5	4	1	1	4	1	1
Mathematics . .	4	6	6	4	2	2	4	2	2
Drawing . . .	2	2	1	2	—	—	2	—	—
Total	30	30	30	30	30	30	30	30	30

To this must be added six hours a week for gymnastics and singing.

(The following extracts are given from the course of study in the various branches) : —

NORWEGIAN.

A. Oral Instruction.

I.—The Ordinary Literary Language.

With regard to the choice of literature, considerable freedom is granted, but certain requirements will always be made. The aim is to give the pupil as complete a knowledge as possible of the cultural, social, and intellectual life of our people during different periods, as it reveals itself in literature. The poetical literature will occupy the chief share of attention, but the selection ought also to include samples of other works which serve to throw light upon sides of that life which are not directly apparent in the former, but of which, in the interests of general education, it is desirable for the pupil to have some knowledge. These samples, which should also be models of good prose, style and diction, will be chosen by preference from more modern writings.

In the choice of both poetical and prose selections, consideration should be paid at every step to the standard of attainment and development of the pupils; but care must also be taken that in the entire selection that is studied in the three classes of the *gymnasium*, the different periods and stages of development in literature are represented by characteristic samples in, as far as possible, a reasonable proportion. As the Danish literature after 1814 is in many ways closely connected with the Norwegian, selections from modern Danish authors ought not to be omitted. With regard to translations from our old literature, and the reading of dialect authors, see below under II.

It is of great importance that there shall be as much read as possible. But it is no less important to oppose the tendency towards *hasty* reading, and to make the pupils understand what profit and pleasure there may be in reading that takes time to dwell upon form and substance.

A lesson must therefore be chosen for each class, and made the object of more detailed treatment; but as far as time will allow, in addition to this, there should be reading with short explanations of works or portions of works that, besides being characteristic of a period or author, are especially entertaining and calculated to arouse the literary interest of the pupils. Some of the best among the poems that have been studied and learnt by heart at an earlier school stage, ought to be taken up again in the *gymnasium*, to make sure that the pupils both retain them in their memory and have a deeper understanding of them. The selection that is taken up for the *examen artium* ought to be studied chiefly in the two upper classes of the *gymnasium*.

The special lessons in the linguistic historical side are divided between Old Norwegian literature and foreign literature (translations). . . . For instruction in the latter; either Greek literature (especially Homer and Plato) is chosen or modern Swedish and Danish literature (if Swedish, emphasis is laid upon the understanding of the subject-matter, and only that degree of attention paid to the phonetics and grammar of the language as is required for this purpose), or other foreign literature (*e.g.*, Shakspeare).

It may be assumed that the *gymnasium* pupils will generally have some interest in extending their knowledge of literature beyond the point actually reached in the instruction. The teacher should guide and support this interest by giving directions as to works that can be borrowed from the school library.

If the reading of literature is to be profitable, home work must be required of the pupils.

This home work, however, must be of another kind than that which is generally required of them. If they are to prepare to read a characteristic poem or larger work of an author, the teacher, must, as a rule, give some guidance, trying especially to connect it with the author's characteristic position in literature, perhaps also mention the conditions under which the poem was written. Upon this basis greater claims may be made upon the pupil's preparation, which, in the first place, will consist in his making himself as familiar as he can with the fundamental thought or feeling of the poem, and giving expression to it in his reading. The more thorough study

will then be carried on by teacher and pupils working together. During the study the fundamental thought is pointed out more fully, and the way in which it is developed; necessary information is also given as to the language, metre, rhetoric, etc. The pupil will then have to explain these, and lastly, by good reading, show that he has fully mastered what he has read.

II. *Old Norwegian and Dialect (Landsmaal).*

The Historical Development of our Language.

The pupils shall learn so much *Old Norwegian* as shall make them acquainted with the regular forms of the language, and afford them an opportunity of seeing our old literature in its original form. The amount of literature reading that can be done in the small number of lessons that are devoted to Old Norwegian, especially in the *realgymnasium* and for Latin pupils, will, however, be far too insignificant. It is, therefore, necessary to supplement it, when engaged on book-language literature, with good translations (fragments of Sagas and of the "King's Mirror"; some poems out of the Older Edda).

The knowledge of "Landsmaal" that has been acquired in the lower Secondary School is kept up and extended. The aim is that the pupils shall be easily able to read and understand the Landsmaal and be acquainted with its literature. They must have some knowledge of the position of the country dialects, and have read some of the popular ballads that have been preserved in them. A due proportion of writings in dialect are to be included in the general selection of modern Norwegian authors that is gone through in the *gymnasium*. But in addition to this, fixed hours must be given to the Landsmaal, in order that there may be an opportunity both of reading more and of dwelling more attentively upon the form of the language.

In connection with the Old Norwegian and Landsmaal, a survey is given of the present conditions of language in our country, and of the historical development of our language. The chief points in this are to be brought forward and emphasised, but linguistic details are to be kept as much as possible in the background. When the occasion is suitable, such remarks and information as to the forms and construction of the book-language are given, as are required to enable the pupils to use with greater confidence the book-language correctly in talking and writing.

III. *History of Literature.*

The history of literature is studied from a concise text-book, giving a sketch of the old Norwegian-Icelandic literature, and then dwelling on the common Danish-Norwegian literature and the Norwegian literature since 1814; in the literature of Denmark since 1814, the most eminent authors are touched upon.

In the 1st class the instruction is restricted chiefly to biographical facts concerning the authors whose works are studied there. After a somewhat wider knowledge of literature upon which to build has been acquired in the 2nd class, a connected study of the history of literature is commenced.

B. Exercises in the Use of the Language.

1. Written Exercises.

The aim is that the pupils shall be able to write upon subjects suitable to their age and stage of development in a satisfactory manner as regards matter and form.

These subjects shall be so chosen that in treating them the pupil may find the material he requires in the various branches of knowledge and ideas which he may be supposed to have acquired in the teaching of school and from life itself.

In the first stage of the *gymnasium* the work of the *middel school* should be continued with exercises of a narrative and descriptive kind. In the second half-year of the first class the pupils pass on to themes which, though still chiefly descriptive, are more explanatory, yet require a

more methodical thought-development ; but with this arises the necessity for corresponding guidance on the part of the teacher. As the subject to be treated must be well known, the pupils should be left as much as possible, in the joint work in the class, to find the material themselves ; but in its arrangement the teacher's guidance must be more evident. When an appropriate arrangement has been agreed upon, the pupils should repeat this in a short outline, which they must then follow in their essay. After thus working up the material, the pupils' exercises will in a great measure be reproduction ; but this reproduction will require work which will give linguistic results, and practice in a definitely arranged development of thought.

When the pupils can go on farther, and begin to write exercises of an argumentative character upon subjects taken from general but higher life-interests, it will be the teacher's task, while referring to concrete circumstances, to make the pupils see that they know more about the subject than they think, and to help them to clear up and make use of their knowledge by teaching them to draw conclusions from what they have observed and picked up in one way or another, to make comparisons, find contrasts and general points of view which will determine the arrangement of the exercise. How far a teacher should go in a preparatory treatment of the subject such as this depends upon its nature and the standpoint of the class. If the subjects are taken from the oral Norwegian instruction, or are such as are touched upon in the course of that instruction, the preparatory treatment may be shortened or omitted. It will always be a chief consideration that the personal work of the pupils shall not be unduly checked ; the preparatory study of the subject, therefore, must be gradually limited to brief hints, and opportunity given for composition without any previous help.

In this kind of instruction, more than any other, it is desirable to assist *each pupil separately*. The teaching here too, however, is subject to the ordinary conditions of the school ; it must be class-teaching, and thereby a limit is set for individual influence and guidance. The *correction of exercises* must also be considered from this point of view. As long as it is a question of faults that do not affect the fundamental idea of the exercise and its development, simple and more formal faults, the teacher will be able to point them out without any further explanation being necessary ; but when the fault goes deeper, when the idea or connection of ideas is incorrect or differs from the plan laid down for the treatment of the subject, when the expressions used are so indistinct or inadequate that they have to be altered, a mere indication of the fault will not be sufficient, while, especially in larger classes, there will not be time to deal with each one. The teacher will then be obliged, as far as possible, to collect such faults under one head, and deal with them for the whole class ; but he will be able to assure himself that his remarks reach each one, by requiring that the defective parts shall be re-written.

One special difficulty for the pupil in these exercises is that in most cases he has no direct model to follow. It will therefore be advisable that the teacher, when he has corrected the pupils' work, should give them a theme written by himself on the same subject for comparison, especially when more difficult subjects are given for the first time.

However important the guidance afforded by individual or general correction may be, it will only have attained its end when the pupils, with sufficient *practice*, can turn the teacher's instruction to account. One theme every three weeks must be considered the minimum amount of such exercise. In addition to this, an opportunity should be given as a rule twice every half year in all the classes, of writing extempore essays in school in several consecutive hours. Themes on class subjects may, if the teacher of such subjects insist upon proper treatment of language and arrangement, support instruction in the mother tongue, but ought not to form a part of it.

II.—*Verbal Delivery.*

The writing of Norwegian compositions will be made considerably easier if the pupils are accustomed to give verbal expression to their thoughts in a clear and decided form. In the introductory remarks to the lower secondary

(*middel*) school plan of instruction, it is also pointed out that Norwegian is a common subject for whose care and nurture in *speech* and *writing* all the teachers are responsible. This refers principally to the attention the teacher must pay to the manner in which the pupil renders an account of his knowledge. This giving an account affords a good training in verbal expression. If a full and connected account be required, it will also teach what may be called "elocution." The practice of the pupils in the verbal employment of the language is, however, of such importance that it demands special attention, especially from the Norwegian teacher. All exercises with this object ought, if possible, to be connected with the rest of the Norwegian instruction, and both the oral and the written part of it might afford an opportunity for this. In the already mentioned oral study of literary works or parts of such, the work consists in seizing and following the development of ideas, and then explaining their contents. An explanation of this kind may be concluded by making the pupil give a connected account of the matter and chain of thought in verbal form. Something of the same kind may be accomplished during the work with Norwegian essays. Every essay will fall readily into several parts, each of which shall be separately developed. The subject may contain contrasts, each of which may be attacked or defended (*e.g.*, the peace question, total abstinence, luxury). There is then an opportunity of giving the pupils, one or more of them, the task of preparing an oral explanation of part of the theme, either to attack or defend one side of it. Under the teacher's direction, this may acquire the form of a regular discussion, and the pupils have an opportunity of finding, on the spur of the moment, the proper expression for their thought, while at the same time the subject is explained and prepared for the written treatment. If by these and similar exercises the pupils' desire to express their thoughts is awakened, their ability to make use of the language either orally or in writing is increased.

GERMAN AND ENGLISH.

In both languages the knowledge and skill gained in the lower secondary (*middel*) school forms the foundation for further instruction. In the *middel* school it is the language first of all that is to be learnt; in the *gymnasium* its content takes the foremost place. The knowledge of the language previously gained is strengthened and extended, but this is accomplished while mastering a selection of the literature. The teaching of the *gymnasium* in German and English is thus, besides increasing the linguistic knowledge of the pupils, to introduce them to the culture of the nations in question, as it is shown in their literature, and thereby contribute greatly to a general education resting upon a modern basis.

GERMAN.

It follows from the number of lessons put down for this subject, that the *reading of literature* cannot be very extensive, and cannot, therefore, be determined chiefly according to literary-historical considerations. Its object must be on the one hand to make the pupils to some extent acquainted with a few eminent authors, who have had a decided influence upon the mental life of the German people, and on the other hand to contribute in some degree to throw light upon the more remarkable events in the history of the nation, especially in recent times.

A selection from the literature forms the foundation for the instruction.

A quantity of 150 octavo pages is set, half poetry and half prose, which is to be gone steadily through and taken up for the *examen artium*. One hundred pages of this quantity is obligatory; alternatives are given for the remaining fifty. The material for the above is taken partly from classic authors, such as Goethe and Schiller, especially the latter, partly from modern literature. It should contain descriptions of events and persons belonging to German history, more especially during the last few centuries, speeches and songs that give expression to the feeling of the time, and so forth. Whatever is taken of an author ought to form a whole; if a work is given in extracts, these ought also to form a complete whole, and be able to be read and understood as such.

In addition to this portion for thorough study, at least eighty pages of easier, more varied matter is read, taken from modern authors, and in some measure, at any rate, calculated to fill up deficiencies in the first-named selections.

All selections that are used in the *gymnasium*, either for thorough or more cursory study, must be approved of by the school committee before they are taken into use. They should be accompanied by a commentary, which shall give the pupils, especially by technical and linguistic details, the assistance necessary for their home preparation. It should chiefly be given in German. In an appendix, there are also given short biographies in German, of the authors represented in the selection. No connected history of literature is read.

As regards the method for the *verbal study* of the selected works, the *gymnasium* ought to carry on the method of the *middel* school. The *elections for thorough study* require to be both understood and mastered. A piece is given for home study. At the first lesson this preparation is tested by the pupil's translation and the explanation he is required to give. This explanation is supplemented by the teacher, who, partly in the form of conversation, goes through the piece, pointing out the chain of thought, and adding anything that may throw light upon it. In doing this the teacher, and after him the pupil, makes use of the German language as far as it is found to serve its purpose. At the next lesson the pupil is required to show what he has understood, either by mentioning, in answer to the teacher's questions, the chief points in the piece, or by giving a more or less free summary of it. In the more cursory study of that part of the selection which is described above as consisting of mixed and lighter matter, home preparation is required; but the material is not made the subject of such thorough treatment as the first part of the selection. In easier parts translation may be omitted; reading aloud will then be sufficient, the teacher insuring himself, if necessary, against misunderstanding or half understanding, by putting questions to the pupil about the contents or the meaning of certain words.

The grammatical instruction is continued. On admission to the *gymnasium*, the pupil must be well-up in the etymology, and have a general idea of the syntax. This knowledge must be confirmed, and, more particularly with regard to the syntax, extended. This takes place especially in the *gymnasium* first class, where, to this end, if desired, exercises of the same kind as in the *middel* school may be written; but in the upper classes, too, it will be necessary to spend some time on the study of grammar. At the *examen artium* the rules of grammar ought not to be made the subject of special tests; but if a candidate showed uncertainty in grammar, this ought to count against him just as much as uncertainty in the language and its use.

Written exercises are associated principally with reading and verbal instruction. This is done by a written reproduction of what is read both from the portion for thorough study and from the lighter reading. As a beginning, some of the chief points in a piece that has been read are dictated or written up on the black board for the pupils to fill in, with or without previous verbal account. This is then carried farther, larger and larger pieces of the selection just gone through being repeated in shortened form, at first with a summary written and read aloud by the teacher for a basis, afterwards following an outline given by the teacher, or found out by the pupil under his guidance. Under this head comes the turning of dramatic scenes or epic poems into prose. Alternating with this, a piece of a narrative character may be read aloud, and the subject-matter repeated. The above-mentioned written exercises may be done by the pupils partly at school, partly at home.

In the *viva voce* part of the leaving examination, the candidate will have to read aloud a piece from the *selection for thorough study*, translate it, and then repeat its subject matter in German. He must further, also in the foreign language, answer such questions as the piece gives occasion to, explain the connection, and give technical and linguistic explanations to an extent justified by previous study at school. This is followed by the reading aloud and translation of an unknown piece.

The written part of the examination will consist of a written repetition of a piece of a narrative character, a page (octavo), or a page and a-half in length, which is read aloud twice over.

ENGLISH.

As a foundation for the instruction on both sides, an approved selection from the literature is employed, from which a smaller selection is again made for the leaving examination. With regard to certain parts of it, the study will be obligatory, in others, a choice within certain limits will be allowed. The selection shall in the first place supply reading matter that is calculated to throw light upon English culture and history in ancient and modern times, while the literary object of giving *samples* of the classic writers in the various styles falls more into the background.

With regard to the *method of procedure in the study of literature*, the plan for German is followed; in both languages the double treatment of the reading matter (first lesson, translation and explanation; second lesson, repetition in the foreign language of the main points in the piece), is a necessary consequence of the requirements of the law. A recapitulation in *Norwegian*, however, of the previous day's lesson (or of a longer section) is of course, not prohibited. For example, English poetry, both as regards form and matter, will often present such difficulties that a *résumé* in English cannot be required of the pupil.

With regard to translation into Norwegian, the plan of instruction for the *middel* school says that, on certain conditions, an attempt may be made to let an English translation of the extract read take its place. A similar mode of procedure is recommended in the *gymnasium* also. When the lesson for the day presents some easy parts it will often be enough to read these aloud, while, on coming to more difficult parts, recourse is once more had to translation. How far this may be carried depends, however, upon the standard of the class, and can only be decided by the teacher himself. Translation will, at any rate, be usual, and the pupil must always be prepared to show his comprehension of the foreign words by a correct translation, put into natural and idiomatic language.

With regard to the *proficiency in the oral use of the language* that is to be gained in the *gymnasium*, the law itself indicates the limitations natural to a secondary school, requiring only practice in repeating the contents of pieces read aloud, which the pupils have gone through in English during the *gymnasium* course, and in answering questions upon them. In consequence of this, part at any rate of the instruction must have such exercises for their special aim, and recapitulation in English of the matter read must be constantly and energetically practised. This will naturally lead to an attempt to carry this farther, and, under favourable circumstances, also make use of the language in other parts of the instruction. There is no doubt that when this is done cautiously, it may be successful and is only to be recommended; but at the same time it must be clearly understood that the teacher can do as he likes in this matter. It is taken for granted that occasionally, at any rate, he tries to use the foreign language instead of Norwegian, when he feels sure that the pupils can follow him; but it is also evident that during the reading, questions of such a nature will arise, that to make English the medium of communication would be a positive hindrance to profitable instruction.

In addition to the portion for thorough study, some easier literature is read on both sides, chiefly in the form of home study, the pupils reading over a few pages (on the "real" side three or four, on the linguistic-historical side six or eight), and giving an account of their contents at school. This is also a lesson, but of a different character to the usual lessons, as the pupil is only required to read the given portion with attention. The object of such reading is not so much to furnish the pupils with fresh linguistic material, as to confirm the knowledge they already possess, and strengthen their linguistic feeling. The reading-matter made use of should if possible be in an edition with notes, in which the pupils will find an explanation or translation of difficult passages. The amount of preparation given by the

pupil is gauged by the teacher by English conversation during the first half of the time set apart for this reading, after which the extemporising is continued.

First Class.

(4 Lessons.)

The aim of the instruction in the *gymnasium's* first class is to enable the pupil to read aloud, translate and explain a short selection from English literature, and to repeat in English the contents of a piece of the studied selection that has been read aloud, and answer questions on it. A written test is also required.

The literary selection ought, among other things, to contain a few examples of the great novelists, some easy historical reading, and some short poems. Eighty pages of this is taken up for the annual examination.

The use of the prepositions is studied, and the most important synonyms (or selected sections of the grammar, *e.g.*, the auxiliary verbs.)

At the yearly examination, the pupils are examined both orally and in writing, very much as in the *middel* school. The *written* exercises for this ought therefore to be chiefly repetitions, as in the *middel* school, the material being made gradually more and more difficult. Special attention is paid to spelling, the supply of words and phraseology, as well as to grammatical correctness; a certain independence of form ought to be gradually aimed at, but this is a secondary object. The aim is to enable the pupil, on leaving the first class, to repeat a narrative that has been read to him, in other words a test of the same nature as that of the *middel* school, but rather more difficult.

The piece will be read aloud twice at the examination.

Second and Third Classes.

A. "Real" Side.

(2-2 Lessons.)

On the *real* side English is studied in the second and third classes, (2-lessons). As the written test is taken on leaving the first class, reading may be the exclusive form of instruction taken up in the second and third classes. A literary selection of 100 pages is gone through and taken up for examination.

This selection ought mainly to consist of accounts and descriptions in prose with special regard to English conditions, past and present, and selected pieces of easier literature. It should be accompanied by a commentary which, in addition to linguistic and technical information, also contains notes on the author's life and works.

In the last two years, 120 pages of easier prose is also read, chiefly as home-study (see above).

Some knowledge is required of the life and works of the authors read.

B. *The Linguistic-Historical Side.*

(7-7 Lessons.)

On the linguistic-historical side English is studied in the second and third classes in 7-7 lessons weekly. The aim of the instruction is to give the pupils, through more extended study during the last two years, a fuller acquaintance with the language and culture of the English people.

In order to make the study as thorough as possible, both the written and oral exercises will be upon a selection for thorough study. This is a fixed amount of 250 pages, of which 170 are obligatory, the remaining 80 having alternatives.

In making the selection for this side, in which English is the principal subject, a concurrent object should be to procure, to some extent at least, material that by its greater difficulty of form and contents, accustoms the pupils in some degree to deeper thought. In other respects, the selection for the last two years should principally aim at the social and historical, keeping chiefly at the time of, and subsequent to, the English

revolution, and trying to bring out the more important points and persons, and the social conditions. With this is associated a small selection of speeches. The English "essay" ought to be represented. There is also a selection of easier literature, among which should be a curtailed form of one of Shakespeare's plays.

The selection is supplied with the technical and linguistic remarks that the pupils require in their home study.

As an aid to the scattered pieces of information that may be given in the course of the reading, the more important technical and literary facts that the pupil has learnt should be gathered into brief, connected "outlines." One of these should give the main features of the most important English political and social institutions (the monarch, the government, the parliament, the church, the law-courts, the universities), in not more than forty octavo pages, the other biographical descriptions of the authors read, and information about their works, viewed in relation to the age in which they lived (circ. 60 pages). The latter outline is to be written in English.

In addition to the portion for thorough study, about 250 pages of easier matter are read in the 2nd and 3rd classes, chiefly as home study.

In the *viâd voce* leaving examination the manner of procedure is the same as in German.

The *written exercises* are continued upon the foundation laid in the *middel* school and the first *gymnasium* class; whereas in German repetition is looked upon as a suitable form for the written test, in English on this side, where the more extended reading and thorough study of the language has given the pupils greater linguistic knowledge and capability, there is an opportunity of carrying the exercises somewhat further in the direction of their general aim by passing on in the last two classes to a *free handling* of the given material as regards *form*.

The aim of the written exercises in the linguistic-historical side is to enable the pupils at the leaving examination to give an account of a piece, or part of a piece, taken from the obligatory part of the selection for thorough study (170 pages), with pertinent literary historical remarks (outline).

As an example of a paper of this kind, assuming that Lokke's "Engelske Forfattere" (English authors) had formed the foundation of the instruction, the following is given:—

1. Give a short account of the landing of William of Orange in England, as told by Macaulay.
2. Relate, from Shakespeare's "Merchant of Venice," what you remember about Antonio.
3. Give a brief sketch of the life of Samuel Johnson, with an account of his letter to the Earl of Chesterfield.

When these exercises are begun in the second class the first thing is to show the pupils clearly how such a condensed account is to be systematically given. This is best done by an outline. For the first few times, therefore, the teacher goes through the piece first, letting the pupils find out the main points, and showing them how to draw up an outline. The outline is then expanded orally, and the essay is written at home, or during a subsequent lesson, in school. The whole becomes a recapitulation of the most important matter in the passage under consideration, and thus a counterpart, in more fixed and concise form, to the *viâd voce* repetition. As the attention of the pupils, from the first, is directed to the internal connection between the various points, they become accustomed to express themselves in properly constructed sentences (principal and subordinate). Special emphasis is laid upon this at first. It is recommended that the pupils in the second class write an outline, as a rule, before every home-task. If the task is to be done in class, the piece of which an epitome is to be given should be set for home preparation.

Written work of this kind ought to be given every other week some-

times as home-work, sometimes as school-work, and a lesson is set apart for their perusal. Alternating with this kind of exercise, it is thought that the pupils ought to write easier and simpler exercises, a repetition, for instance, of the previous day's lesson, of a piece of the home-work, or of unknown pieces, chiefly of the same kind as the first class. Among these exercises, written translations of more difficult sections of the portion for thorough study may be taken. These exercises, too, can partly be given as home-work, by repeating something that has been related by the teacher in school.

These easier exercises are read over and judged by the teacher, but are then gone through in a wholesale manner, a few faults pointed out, and a good exercise or the original piece read aloud. Not more than a quarter of an hour should be given to this.

During the *repetition* of the portion for thorough study, the pupils must make a note at home of the passages about which they require information. When all the questions are answered, a survey is given of the subject-matter by the joint work of teacher and pupils, and the most important points as regards technicalities or form are elucidated. In this manner five or six pages may be gone through on an average at each lesson.

LATIN.

The object of the study of Latin is to bring those pupils who desire, or for subsequent studies require, a knowledge of the language, so far on that they can understand without great difficulty classical Latin prose. But as the instruction in the Latin language will also be useful for the intellectual development of the pupils, the reading of a selection from the literature will be of advantage to their general education, as they thereby obtain a somewhat fuller impression of the ancient culture, and of the connection of modern culture with it, than the historical instruction alone can give.

If, however, this is to be attained in a small number of lessons, the instruction must always keep to the most essential points, without becoming lost in details that cannot profitably be included in so limited a course.

With regard to grammar, both the etymology and the syntax ought to be read with the object of enabling the pupil, in the easiest manner, to gain a confident understanding of the Latin text. The exposition ought, on the whole, to be restricted to the regular usage in classical prose, and build upon the general linguistic insight that has been previously acquired through Norwegian and foreign languages. The pupil's greater maturity will now make it easier for him to *understand* the forms and modes of expression in the language, and he will thus be able to utter them in more rapid succession. But, on the other hand, it is to be feared that the forms do not always *become fixed* in the memory. Care must therefore be taken from the first that the elements are learned accurately, and that during the whole course of instruction, the foundation does not give way.

The history of literature, antiquities, and mythology cannot be treated as separate subjects. What is found about them in various places in the historical class-book is gone through in connection with the Latin instruction in the *gymnasium* third class, when, as far as circumstances permit, supplementary and explanatory remarks on the ancient culture should be associated with it, the teacher especially recalling and summing up the information that was imparted during the reading of the author.

The aim of the instruction is that the pupil shall have gone through and can translate and explain a small selection from classical Latin literature and that he can in writing translate a previously unread easy prose piece, principally of historical matter.

For the portion for *thorough study*, which will be the subject of *vind voce* examination at the *examen artium*, there are fixed:

At least 130 octavo pages of classic prose (principally Caesar, Cicero, and Livy).

Of Cicero must be read at least 32 pages (e.g., the speech *Pro lege Manilia*), and of Livy at least 30 pages. Instead of part of the above may be read up to 900 lines of Horace or Virgil, or of both poets; 30 lines is then to be reckoned equivalent to one octavo page of prose.

Besides the portion for thorough study, as much *cursor*y reading is done as there is time for.

The *written* examination in Latin translation must be much easier than it has hitherto been. How the requirement is to be framed cannot be certainly determined in advance.

HISTORY.

The aim is for all pupils the acquisition of a more perfect acquaintance with the more important parts of ancient, Norwegian, French, German, and English history, most detailed of the time after the French Revolution; also the social arrangements of Norway and the other most important countries.

The number of lessons set apart for that part of the instruction that is common to all is respectively 3-3-3 hours weekly; for the special instruction in the linguistic-historical line, two hours a week in the second and third classes.

Norwegian history, with which must be associated the more important parts of Danish and Swedish history, ought to be read in sections along with general history. Norway's social arrangements are purposely reserved for the third class; where circumstances make it especially desirable, this may be taken earlier, *e.g.*, in the first class.

As the material, especially in its principal features, is not entirely unknown to the pupils, on account of the knowledge they bring with them from the *middel* school, a previous perusal is not necessary, except with regard to the more important and difficult sections, where association with what has gone before, and an emphasising of the main points, is requisite to a clear understanding of the context. The object hereby attained is that the pupils, with a reasonable amount of work, can certainly master what the text-book puts before them. That what they read is mastered must continually be tested by examination and conversation, in which the material is at the same time more minutely discussed and enlarged upon. Now and then a written paper is set to test the pupil's comprehension of a more difficult subject.

In all the classes the teacher should devote a few lessons to freer discourse upon special points or a connected section. These discourses, of which the main purpose is to arouse and maintain a deeper historical interest, may be given at the discretion of the teacher within domains that he has made the object of special study, and in which he therefore feels most at home. Directing the more interested of the pupils to suitable historical reading is also to be recommended.

[The plan then gives a detailed account of what is to be gone through in the various classes. The universal history to be studied in the 3rd class is here given as an example.]

The European Reaction, 1815-30.

The Holy Alliance and the congresses. The struggle of the Alliance with the liberty movements in Germany, Spain, and Italy. The Spanish colonies. The Greeks' struggle for freedom. Internal conditions in England; Castlereagh, Canning, Wellington, the Irish question. The reaction in France under Louis XVIII. and Charles X. The revolution of July.

The Period from the July Revolution to the February Revolution, 1830-48.

(The Progress of Liberalism.)

The consequences of the July revolution in Belgium, Poland, Germany, Italy, Switzerland. Reforms in England; the Reform Act, the abolition of slavery, other humane and liberal reforms, the Irish repeal. The July monarchy in France; Louis Philippe's home and foreign policy. The parties. The reform banquets. The February revolution.

The condition of culture during the first half of the 19th century. Scientific movements (natural sciences and geography, history and

languages, political economy, religion and philosophy). Literature and art. Inventions and the development of engineering. Working-men.

The Period from 1848-71 (struggle for nationality).

The effects of the February revolution in Germany (March movement, Frankfort parliament.) Insurrections in the Austrian monarchy and the struggle in Italy. The triumph of reaction. The second French Republic. The national workshops. The *coup d'état*, 1851. Napoleon III. and *France's supremacy in Europe*. The Crimean War. The union of Italy. *William I. of Prussia* and the war with Denmark in 1864, and with Austria in 1866. The North German alliance. In *England* changing ministries. The struggle in China and the East Indies. The United States republicans and democrats. The slave question. Lincoln's election. The Civil War. *Napoleon's sinking influence*; the expedition to Mexico. The opposition in France. The plebiscite of 1870. The Franco-German War, 1870-71.

The Period after 1871 (the social movement).

France.—The Commune in Paris. The constitution of 1875. Army and school reform. Colonial politics. The parties.

The other Romance countries (Italy, Spain, and Portugal).

Germany.—The constitution of the empire. The "Kulturkampf." Social democracy. Colonial policy. The meeting of the three emperors. The Triple Alliance.

England.—Changing ministries. New election law. Irish Home Rule. Foreign policy (in Africa and Asia). The colonies.

Russia.—Reforms after the Crimean War. Nihilism. Extensions in Asia. Pan Slavism and the Eastern Question. The Russo-Turkish War. Russia and Poland. Russia and Finland.

The Eastern Asiatic question (China and Japan). North and South America.

The conditions of civilisation in the second half of the nineteenth century. Movements in the fields of philosophy and religion (the doctrine of the Pope's infallibility). The sciences and art. Business (colonial policy) and social conditions (the social movement).

The Political and Social Organisation of Norway.

(a).—*The Constitution.*

I. The fundamental features of the constitution.

II. The union between Norway and Sweden.

III. The executive powers.

1. The king and the Government.

2. The Storting.

The division of power between the King and the Storting.

a. The executive power.

b. The legislative power.

c. The power of granting supplies.

d. The constitutional supervision.

3. The judicial power.

IV. Restrictions upon the executive power, and guarantees for individual liberty.

(b).—*The Administration.*

I. The fundamental features of the administration.

II. The central administration.

III. The local administration.

A short repetition of the first and second class lessons.

(The following regulation regarding the special lessons in the linguistic-historical line is of peculiar interest.)

A selection of historical documents and matter bearing on the history of civilisation are gone through after an approved collection, arranged with regard to the history material that is taken up in the same *gymnasium's*

reading lessons in the various languages. The pieces of the collection are taken from the history of civilisation during the last century; but pieces are also included that may serve to extend the knowledge of mediæval society, and of the earlier part of the history of more modern times, so that a firm foundation may be laid for the comprehension of the development from and in the French Revolution.

The pieces of the selection are some of them translations, some in the original language. The latter are especially parts of the portion taken up in the third class. The pieces are gone through, and minutely explained; but greater emphasis must always be laid upon points of historical and general instruction, than upon the purely linguistic side. A thorough knowledge and comprehension of the selection read is required for the *examen artium*.]

GEOGRAPHY.

A. Physical Geography.

Physiography.—(a) Introductory remarks on the form and size of the earth. (b) The earth's specific gravity. (c) The earth's internal heat. (d) Terrestrial magnetism.

Short Survey of Petrography.—(a) Sedimentary and eruptive rocks and their formation. (b) Description of the most important kinds of rocks; (1) Sedimentary, *e.g.*, clay, slate, limestone, sandstone. (2) Eruptive, *e.g.*, granite, syenite, porphyry, gabbro. (3) Crystal line schists, *e.g.*, gneiss, mica-schist, granitoid schist, hornblende schist. (c) A little about stratification.

Dynamic Geology.—(a) Changes of level. (b) The formation of mountain chains. (c) Volcanoes. (d) Earthquakes. (e) Weathering and denudation. (f) Springs and water that circulate below the surface of the earth. (g) Erosion by water. (h) Glaciers and glacial erosion.

The History of the World's Development.—(a) The ages of the strata. (b) Fossils. (c) The formations.

The Earth's Surface.—Its present appearance the product of all the forces described above. (a) Coasts. (b) Continents and islands. (c) Mountains and valleys. (d) Plateaus and plains. (e) Rivers. (f) Lakes.

Oceanography.—(a) The division of the ocean. (b) Depth. (c) The ocean-bottom. (d) Salinity. (e) Temperature. (f) Ice. (g) The movements of the ocean: (1) Waves. (2) Tides. (3) Currents.

The Atmosphere.—(a) The composition of the atmosphere. (b) The temperature. (c) Atmospheric pressure. (d) Winds and moisture. Climatic conditions of the earth. (f) The climate of Norway.

B. Astronomy.

The earth's place in the universe, with introductory historical remarks upon older astronomical theories, the *stellar heavens*.

The Copernican System.

Kepler's Laws, and, in connection with them, a short account of the planets and their satellites.

The moon, its phases and eclipses.

Introductory treatment of the *earth's form and size*.

The earth's motions.

The celestial globe.

The sun's apparent motion.

The sun as the measurer of time.

Without going more closely into the manners of procedure, the pupils are given an idea of the determination of *geographical latitude and longitude*, of the *actual form and size of the earth* (measurement by degrees, triangulation), and, lastly, of the *figurative representation of the earth* (the globe, maps).

C.—Political Geography.

The full benefit of the study of "Norge og de vigtigste andre landes økonomiske forhold" (The Financial Conditions of Norway and Other Important Countries) will probably only be gained at a higher stage. In

the first place, all the means of livelihood in Norway are passed in review, with all the conditions that thus come under consideration, *e.g.*, financial conditions, population, etc.* Next, the corresponding conditions in the most important European countries and the United States are taken, and, as far as can be done naturally, are illustrated by comparison with our own country. In connection with this a survey is given of the various means of communication (post and telegraph), and a general treatment of the question of the importance of colonies to a nation, and a short survey of the most important colonies. A natural opportunity will here be afforded for the repetition of important parts of general topography.

An approved text-book must be used.

At the *examen artium* an account must be given of the whole of the *gymnasium* geography portion.

NATURAL SCIENCE.

The requirements of the law concerning natural science in the *gymnasium* are as follows:—

A knowledge of the most important chemical laws, of animal and vegetable development, and of the essential features of Human Physiology and Hygiene. On the “*real*” side also a fuller knowledge of Physics.

Chemistry.

The instruction in Chemistry, in the first stages, ought to be aided by experiments throughout, and should therefore be carried on in the school chemical laboratory. Every school must be furnished with a laboratory.

If time allows, all experiments must be carefully prepared.

A text-book, adapted to the plan of instruction, should be in the hands of the pupils, but chiefly for the purpose of avoiding the necessity of taking notes during the lecture which accompanies the experiments, and as an aid to recapitulation.

Nothing is learnt about chemicals until they have been exhibited, partly explained, and their most important properties discussed.

A short time at the beginning of the lesson is devoted to examination from the book of what was learnt at the previous lesson from experiment and demonstration.

In specially favourable circumstances (with a clever class, and a small number of pupils), it is recommended that the pupils shall have an opportunity of performing some of the easier experiments themselves, under the teacher's guidance and immediate supervision.

Before beginning to discuss the separate elements and their combinations, some lessons ought to be devoted to introductory experiments and explanations. In the course of these, the difference is shown between mechanical mixtures and chemical combinations, the ideas contained in the words “atom,” “molecule,” “affinity” are introduced; the atomic signs and atomic weights are discussed sufficiently to allow the pupil to understand the meaning of a chemical formula and a chemical equation; the permanence of matter explained.

When the whole appointed course of Chemistry has been gone through experimentally, the time has come for a more systematic treatment of Theoretical Chemistry. The teacher has, of course, previously on every suitable occasion that has offered itself during the experimental course, allowed the pupils to find out for themselves, or shown them, the general laws that can be deduced from the experiments.

In the course of the theoretical instruction, the following subjects are taken up:—

The *generation of heat* by the formation of chemical combinations.

The *influence of temperature, decomposition, and volatility upon affinity.*

The *law of definite and multiple proportions in compounds.*

The *atomic theory.*

* The constitution and administration of the State, under the new arrangement, come under the head of history.

Chemical formulæ and equations, to which are added easy calculations. There may already have been opportunities of taking some of these separately during the experimental course.

The atomicity of the elements.

Human Physiology and Hygiene.

First class, two lessons a week, or about thirty-six lessons in the second half-year).

The instruction in physiology and hygiene is assigned to the second half-year in the first *gymnasium* class.

It will, however, hardly be possible to go through a complete course of human physiology. Some parts of physiology from their nature are scarcely fitted for treatment in school; others will be either too difficult in themselves, or too little worked out to be suitable as a subject of instruction in the *gymnasium*. The number of lessons given to the subject also forbids a complete treatment. It is therefore necessary to make a practical selection.

While the physiology of the nervous system can only be taken very briefly, that of nutrition and the change of matter appears for many reasons to be the branch that is to be preferred; and in addition to this, the physiology of respiration and the composition of the blood will form important points for instruction.

Closely associated with this are the sections of hygiene taken next, and naturally belonging to the sections of physiology that have been gone through—nutritive substances and articles of food (especially milk), their combustion heat and labour equivalent. Food-allowances (with easy calculations). Ventilation, which has only been treated quite in an elementary way in the *middel* school, will here be discussed more thoroughly.

Development and Life of Animals and Plants.

(One hour a week in each of the two upper classes.)

When the subject is considered in relation to the number of lessons at its disposal, it will be evident that a strict limitation will be required. It is scarcely possible to define a limit in detail, however, as pedagogic experience in this department is entirely wanting in this country. It will be necessary to proceed experimentally, it is to be hoped with the guidance of a text-book prepared with technical and pedagogic judgment, which in the first place should indicate the train of thought according to which the subject should be treated, and in the next place point out the preparations that could be employed with the greatest benefit in the course of the instruction, and the series of experiments that there will be an opportunity of showing.

With regard to the instruction, it must necessarily be kept to the most essential, without trying to include the greatest possible amount, but with concentration upon the main points whose investigation may give the pupils, if not a full, at any rate as far as it goes, a clear impression of the development of life in organic nature.

Botany (1-0 Lesson).

Beginning with the cell, the anatomic structure of plants is gone through as regards their four principal organs (root, stem, leaf, hairs) in angiosperms and gymnosperms, also of the flower, and the fruit with the seed.

In the next place the germination of plants is discussed, their nutrition, growth, and movement. A little about parasitic and insectivorous plants, the means of defence, hibernation, multiplication (vegetative and sexual), and semination of plants. The general character of cryptograms, and certain groups. The teaching must be accompanied as far as possible by experiments showing the natural forces treated of, in activity.

Living plants must be frequently used as material for instruction, besides plates and microscopical and other preparations.

Zoology (0-1 Lesson).

After having discussed the cell and its varied development, according to the function for which it is destined, the various classes of animals are reviewed, beginning with the very lowest, one-celled animals (Protozoa). No systematic survey is intended by this, but by discussing different types, it is especially endeavoured to illustrate the consecutive order from the extremely simple to the more complicated organisation, and the adaptation of the organs to natural surroundings and conditions of life. In the *gymnasium*, the types should chiefly be chosen from the lower animals, as the higher animals, especially mammals are supposed to be known from the *middel* school and the lessons in human physiology in the *gymnasium* 1st class. Parallels, however, must continually be drawn between conditions previously known among the higher animals, and those observed among the lower.

Physics.

(4-4 Lessons in the 2nd and classes on the *real* side).

In the two highest classes on the *real* side, a complete course of Physics is gone through in four lessons a week.

Whereas in the *middel* school, the instruction consisted principally of experiments and observation of the phenomena resulting from them, together with an elementary explanation of them, in the *real gymnasium* there is of course required, in addition to this, a deeper insight into the theoretical proof of the physical phenomena, and their mutual connection.

Here, too, of course, experiments and demonstrations will require a considerable amount of time. Every *real gymnasium* must be furnished with a complete apparatus for the purpose; one of the teachers in the subject must be responsible for this. There must be an up-to-date catalogue.

The laws expressed in the form of mathematical formulæ must be elucidated from all sides, their more thorough comprehension and mastery being ensured by the working out of all that kind of arithmetical examples to which they naturally give occasion.

During this work, however, care must be taken not to make physics subservient to mathematics. Every strained employment of formulæ should be avoided, and the solution of more complicated problems should not be attempted, where the chief thing is rather skill in the mathematical treatment of the given equations than a thorough insight into the meaning and employment of the formulæ.

The course in physics is taken in the following order:—

Dynamics, acoustics, optics, heat, magnetism and electricity (or dynamics, excepting wave-motion; heat, excepting radiant heat; wave-motion, sound, light and radiant heat; magnetism and electricity).

(The plan then explains in detail the mode of procedure in these branches.

MATHEMATICS.

The aim of the instruction set up by the law is as follows:—

Those parts of elementary arithmetic and algebra and geometry not taken in the *middel* school. Acquaintance with the fundamental ideas of trigonometry, and their employment in the calculation of plane triangles. The elements of stereometry. Practice in construction and calculation. In the *real* line, moreover, analytical geometry, as far as it can be naturally taken without a knowledge of higher mathematics.

The method of instruction is the same in principle as in the *middel* school, but adapted to the greater development and maturity of the pupils. That which the pupils cannot without too much labour master by themselves must always be first gone through by the teacher, while, on the other hand, opportunities must not be neglected of exercising and making use of the pupils' own ability to find their way under the teacher's guidance. The aim of the examination should be to let the candidate give a clear and well-founded account of the subject, without the teacher's being continually obliged to interrupt with leading questions.

(The method of procedure in the various subjects is then described more minutely.)

Specially for the real gymnasium :—

Analytical Geometry.

The right line, the circle, the ellipse, the hyperbola and parabola in rectangular and polar co-ordinates system. Discussion of the geometrical importance of the ordinary quadratic equations. The theory of poles and polars must be included.

The Theory of Functions.

The properties of the integral functions. Higher arithmetical series.

DRAWING.

The aim formulated by the law is—skill in perspective drawing of and in shading objects of simple form. On the real side also practice in projection (the elements of descriptive geometry).

The instruction in *perspective drawing* will be a continuation of the *middel* school teaching, the problems being adapted to the greater maturity and skill of the pupils. In connection with this, exercises are given in shading drawings.

The limits within which the *exercises in projection* ought to be kept is fixed by the *real gymnasium* course in elementary solid geometry. The pupils must learn to represent the polyhedra taken in this course (though not the regular dodecahedron and icosahedron) in various positions, both entire and intersected by planes, and developed. The instruction must begin with practice in drawing objects in horizontal and vertical projection (with what was learnt previously in the *middel* school), and is gradually extended to take in the whole amount to be studied.

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EDUCATION IN NORWAY IN THE YEAR 1900.

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EDUCATION IN NORWAY IN THE YEAR 1900.

A.—EDUCATION.

I. ELEMENTARY INSTRUCTION.

The development and improvement of the primary schools has been an object of the nation's endeavours for the last century. It has been clearly seen that in a democratic community like ours, it is to the interest of individuals, as well as of society at large, to improve the education of the people.

By a royal ordinance of 1739, an endeavour was made to introduce into the country a general school-attendance and a permanent school for each church parish. The measure, however, was never put into practice. On account of the scattered population, the long distances, and the lack of teachers, it was left, by an ordinance of 1741, to the several parishes with the approval of the magistrates, to arrange their school affairs "according to their opportunities and the situation of the lands."

The primary schools of the towns in the beginning of the century were called, and arranged with the intention of being "poor schools." In certain towns, however, there were primary schools of a somewhat different stamp. A considerable improvement was made by the act of 1848, which arranged the elementary instruction in the towns.

A general arrangement of the rural elementary schools had already been come to by an act of 1827. By this act, it was determined that near every principal church in the country, there should be a permanent school, but otherwise ambulatory schools. Both before and long after the act of 1827, the priests were the leaders in school matters, each in his own parish; and it is owing in a great measure to them that, in spite of the numerous difficulties of all kinds that had to be overcome, the school has made continual progress. The act of 1827 was replaced by an act of 1860, which enjoined the establishment of a permanent school in every school circle, fixed the minimum of hours for instruction, introduced several civil subjects, improved the condition and training of the teachers, and arranged the management and superintendence of the school in a better way.

After the acts of 1848 and 1860, progress was more rapid, especially after the state (from the beginning of the seventies) had begun more and more to give grants to the primary schools. The acts of 1848 and 1860 were in their turn annulled in 1889, by the acts now in force for primary schools in the country and in the towns, whereby the primary schools of our country have been considerably improved.

The development of the school has always been in a decidedly democratic direction. From a school for the poor, it has risen to

a *national* school; from a church school to a school in which a general education is given, which ought to be common to all members of society. The local authorities and the parents have acquired a decided influence upon the arrangement of the school, and an organic connection has been brought about between the primary school and secondary education.

A. THE ARRANGEMENT AND AIM OF THE PRIMARY SCHOOL.

The Norwegian primary school has a seven years' course, adapted for children between 7 and 14 years of age. It is free to all children in the kingdom. There is no obligation to attend the public primary school; but the *obligation of education* exists, in that every child between 8 and 15 in the country, and between 7 and 15 in the towns, that is not in receipt of instruction calculated to bring it up to the standard of the primary school instruction within its 15th year, is referred to the primary school, and the attendance of the child there can be enforced by a fine imposed upon the parents or guardians.

The primary school in each municipality is governed by the School Board (*skolestyret*), which consists of a priest, the chairman of the Municipal Council (or one of the aldermen), one of the teachers chosen by the body of teachers, and as many other members (men or women) chosen by the Municipal Council as the Council itself determines. In the towns, at least one fourth of the members of the School Board chosen by the Council, are chosen from parents who have children in the primary school. The School Board elects its own chairman. It appoints the teachers, gives detailed instructions as to the arrangement of the primary schools of the municipality, draws up the school plan, with the plan of instruction and division of lessons, and sends each year to the Municipal Council an estimate of the sums supposed to be required to meet the expenses of the school for the coming year. It is also the duty of the School Board to see to the education of children who are not pupils in the primary school. The School Board appoints a *Board of Inspection* for every primary school, consisting of one member of the School Board as chairman, and three members (men or women) chosen in the towns by the parents of the children attending the school, and in the country by such parents and the ratepayers in the school district. This committee maintains a constant supervision of the school, and takes care that there is a good attendance and order. It gives to the School Board the information and advice that are required, and in the country is to have the opportunity of giving its opinion before the appointment of teachers. The School Board and the Board of Inspection in the country may also lay matters connected with the primary school before a *district meeting*—i.e., a meeting of the ratepayers of the district, and those parents of children attending the school, who live in the district. Some questions must be discussed at the district meeting before they can be decided *e.g.*, whether corporal punishment may be

administered, changes in the district regulation, etc. In the large towns, the School Board appoints *school inspectors*, and where there are several schools, as a rule, a *head-master* to each.

For every county, there is a *County School Board*, consisting of three members chosen by the County Council. The County School Board has to take charge of the common educational matters of the county, and to make proposals to the County Council concerning the income and expenditure of the county schools. It has to gain the necessary acquaintance with the primary schools and continuation schools of the county, and may appoint a county inspector to assist in the supervision of the primary schools of the county, a permission, however, which has scarcely ever been made use of.

The *Department for Ecclesiastical Matters and Public Instruction* is the highest school authority in the country. Next come the *School Directors*, one for each of the 6 dioceses, for the superintendence of the primary schools. Bishop and dean take part in the superintendence, and the priest in supervising the instruction in religious knowledge.

In the *country*, every municipality is divided into *school districts*. In 1895, the number of these was 5,923. Each school district has its primary school, with at least 2 classes, one for children from 7 to 10 years of age (infant school), and one for children from 10 to 14. In consideration of the distances, the districts in many places are again divided into several infant-school districts. The *compulsory* number of school-hours amounts to 12 weeks per annum, and can be increased to 15 weeks. Six weeks' *voluntary* instruction may further be added to this. Every school-week amounts, in the infant school to 30, and in the upper school to 36 lessons. Thus in the infant school, each child has at least 360 lessons per annum, and the number may be increased to 450 or 630; and in the upper school each child receives at least 432 lessons annually, and the number may be increased to 540 or 756. In exceptional cases, both schools may be taught together.

In the *towns* the primary school is divided into three divisions, intended respectively for children between 7 and 10, 10 and 12, and 12 and 14. Each of these divisions may again be divided into several classes. The primary schools in the towns are, as a rule, divided into seven progressive classes, which yet again, when necessary, are divided into parallel classes. Instruction has to be given daily for a number of hours amounting to from 18 to 24 a week. Voluntary instruction may be added to this in the two upper divisions. The total number of hours, however, must not exceed 30 per week. The school year, after the subtraction of the holidays, is intended to number 40 weeks.

Both in the country and in the towns, whatever *voluntary instruction* is given must be imparted out of the school's legally ordained time for instruction, so that the latter does not thereby suffer. In the country, the subjects of instruction in the voluntary lessons shall, as a rule, be the ordinary subjects of the primary school and others closely allied to them. In the towns,

instruction in foreign languages may be included. Domestic economy is becoming more and more frequently a subject in voluntary instruction.

For every primary school special *buildings* shall be erected or rented. In the country, however, in the infant-school districts and the primary-school districts that have less than 20 scholars, school may be held in rotation in the houses of the inhabitants of the district, where sufficient room can be procured. Ambulatory schools are steadily decreasing. Whereas in 1837, 92 per cent. of the children attending school in the country were taught in ambulatory schools, in 1895 this was the case with only 2 per cent

The *syllabus of subjects* in the primary school is religion, the Norwegian language, arithmetic, elementary geometry, writing, singing, geography, history (including a knowledge of the administration and local government of the country), botany, zoology and the elements of physics, with the fundamental features of hygiene (including instruction in the effects and dangers of the intoxicating liquors), manual work, drawing and gymnastics (in which may be included preparatory rifle practice). In undivided schools in the country, the introduction of manual work, gymnastics, and drawing is a voluntary matter; if the school be divided into classes, only one of these subjects is compulsory, but in the towns all three subjects are compulsory. Dissenters are exempted from instruction in religious knowledge.

The *standard to be attained* is fixed by law only with regard to religious knowledge. In this subject the standard aimed at is a thorough knowledge of the main substance of Bible history and church history, and of the Catechism, according to the Evangelical Lutheran creed. In the other subjects, it is left to the School Board to fix the standard in the school plan. In most of the rural municipalities, the standard of the various subjects and the time-table are determined principally in accordance with a "normal plan," which was sent round, after the act of 1889, by the Ecclesiastical Department, as a guide, and was drawn up after conference with the school directors.

In the most northerly counties, the population of several municipalities consists partly of Finns and Lapps. This necessitates the use of Finnish and Lappish in several schools, as an auxiliary language in the instruction of children of these nationalities.

In accordance with the "normal plan," the subjects and time-table in most rural municipalities, are arranged somewhat in the following manner:

Subjects.	Lessons in the School-week.												
	Undivided School		School with 1 Cl. for each Div.		School with 3 Classes.			School with several Classes					
	1st Div.	2nd Div.	1st Cl.	2nd Cl.	1st Div.			2nd Div.					
					1st Cl.	2nd Cl.	3rd Cl.	1st Cl.	2nd Cl.	3rd Cl.	4th Cl.	5th Cl.	
Religion . . .	8	9	7	7½	7	7	7	7	7	7	7	7	7
Norwegian . . .	8	7	8	7	7	7	7	10	8	7	7	7	7
Arithmetic . . .	5	6	5	6	5	6	6	4	5	5	5	5	6
Geography . . .	} 2	2	} 3	2	} 3	2	2	} 2	} 3	2	2	2	2
History . . .													
Science . . .													
Writing . . .													
Singing . . .	5	4	5	4	5	4	2	5	5	4	3	2	2
Manual work . . .	2	2	2	2	2	2	2	2	2	2	2	2	2
Drawing . . .	} 2	—	} 2	—	—	2	2	—	—	1	2	2	2
Gymnastics . . .													
Total	30	36	30	36	30	36	36	30	30	36	36	36	36

In the towns, where the school terms are of longer duration, and where absences are less frequent, it has been possible to set a higher standard than in the normal plan for the country districts. In Kristiania, where the primary school is considered to be among the best and has been the model for a number of other towns, the subjects and lessons are arranged according to the following table (the figures in parantheses refer to girls):

[illegible]

It is decided in the school plan whether yearly and leaving examinations are to be held, and if so, how they are to be arranged. The form of the leaving certificate of the school is also determined in the school plan.

The pupils. In the country, the number of pupils in each class must not exceed 35, and in the towns 40, except temporarily or from urgent pecuniary considerations, and must never exceed respectively 45 and 50. In the country, boys and girls are generally taught together, in the towns, as a rule, separately. Out of the rural school districts in 1895 — 5,923 in number — 69 per cent. had separate divisions (with two or more classes), while in 31 per cent., the school was undivided. In 1875, the proportion was 39 to 61 per cent. The number of children in each class in the country in 1895 was about 20. In the towns, the number of classes in 1895 amounted to 2,095, of which 829 were boys' classes, 798 girls' classes, and 468 mixed classes. Each class had on an average 36·8 pupils.

In 1895, 97 per cent. of the children in the rural districts, who were of the legal age for instruction, were taught in the primary school, 2·5 per cent. outside the primary school, and 0·5 per cent. received no instruction. In the towns, the numbers were respectively 89, 10·1, and 0·9 per cent. In 1895, the number of absences of children taught in the rural elementary schools, was 10·4 per cent., in the towns, 7·4 per cent. More than 10 per cent. of the total number of children attending the primary school in the country in 1895, had to go more than 2 miles to school. This shows, in one respect, what difficulties the primary school has to contend with in this extensive country. For the number of pupils and classes, see the following table:

Number of Pupils and Classes in the Primary Schools.

	In the Country.			In the Towns.		Towns and Country.
	School Districts.	Separate Divisions or Classes.	Pupils.	Classes.	Pupils.	Pupils.
1840 -	7,133	—	168,813	—	12,130	180,943
1870 -	6,338	—	203,800	839	32,959	236,759
1880 -	6,350	9,670	204,926	1,198	42,377	247,303
1890 -	6,198	11,018	230,628	1,660	56,772	287,400
1895 -	5,923	12,701	253,916	2,095	77,217	331,133

Needy children receive their school books, etc., from the municipality. In Kristiania, of late years, the Municipal Council has

also voted the necessary funds for supplying all needy school-children with a meal every school-day. In 1898, 711,302 portions were distributed, of which 18,341 were paid for. The average number of children fed was 5,420 daily, 139 of whom paid. As the average number of pupils was 22,750, about 24 per cent. of the children have been fed at the schools. The cost of this feeding for 1898 amounted to kr. 93,412 of which kr. 2,122 was covered by the sale of food, etc. In other towns too through private agency, poor school-children have been fed.

B. THE PRIMARY SCHOOL TEACHERS, THE CONDITIONS FOR THEIR APPOINTMENT, TRAINING AND SALARIES.

The teaching in the primary school is performed by publicly appointed teachers. In the country, at least 24 school-weeks a year are to be assigned to each regular teacher; at present an average of 33 weeks falls to each. Private or assistant teachers may be employed as teachers in singing, gymnastics, drawing and manual work.

The teachers' situation may be filled with men or women according to the decision of the local authorities; but at each primary school in the towns, there must be at least one master and one governess.

Year.	Number of Regular Teachers in the Primary School.				
	Country.		Towns.		Total.
	Masters.	Governesses.	Masters.	Governesses.	
1840 . .	2,112	—	124	—	2,236
1870 . .	3,190	—	350	174	3,714
1880 . .	3,390	140	390	438	4,358
1895 . .	3,801	1,037	601	1,079	6,518

All appointments as teachers in the primary schools are made by the School Board. No one can receive a permanent appointment unless he or she has completed the 20th year, belongs to the Established Church, and has passed a teacher's examination. About one third of the situations, however, may be filled on terms of 3 months' notice, and for these appointments, and for visiting and assistant teachers, no examination is required. There are two grades of teachers' examinations. The lower, which corresponds to the entrance examination of the training colleges, gives what is requisite for a permanent appointment in the infant school in the country. The higher teachers' examination, or leaving examination at the training colleges, is required for a permanent appointment in the town primary schools, and in the

country primary schools' second division. The teachers' examinations are organised by an examination committee consisting of three members who also have to superintend the instruction in the teachers' training colleges.

There are at the present time, 10 colleges for the training of teachers for the primary school, 6 of which are public, one for each diocese, and 4 private. The teaching in the public colleges is free. In the private colleges, by the aid of government grants, a considerable number of free students are admitted. The course at present is 2 years. In a government bill lately brought before the Storting, however, it is proposed to make it 3 years. Both men and women are admitted.

The following subjects are taught at the training colleges: Religious instruction (in the 1st Cl. 6 lessons a week, in the 2nd 4), Norwegian (7—6), history (3—3), geography (2—1), science (3—3), arithmetic and geometry (4—3), writing (1—0), drawing (2—1), manual work (2—2), music (3—2), gymnastics (3—2), pedagogy (1—1), practical exercises (0—9).

To each of the public colleges is attached a 1 year's preparation class. Government aid is also given to private preparation courses for lower teachers' examinations, and for admittance to the training colleges. In 1897—98, 18 of these courses were held.

For the training of masters and governesses in sloyd, needlework, domestic economy, gymnastics, drawing, singing, writing and repetition in these subjects, courses are held at longer or shorter intervals, according to requirement. Holiday courses are moreover held for the masters and governesses of the primary school, the so-called continuation courses, lasting 5 or 6 weeks. At these courses, of which there is one in each diocese, Norwegian, history and natural science are especially taught. Discussions on school and education questions are also held at several of the courses. The number of students at each of these courses is from 50 to 130. Since 1894, summer courses of 12 days have also been held annually at the University and at the Bergen Museum, especially adapted for giving instruction to primary school teachers, more particularly in natural science. These courses have been very well attended.

Towards travelling scholarships for primary school teachers, the government votes an annual sum, which of late years has amounted to 10,000 kr. Several municipalities also give travelling scholarships.

The average salary of teachers in the country amounted, in 1895, to 778 kr., being rather less for the governesses and rather more for the masters. The salaries are regulated as salary and allowance for keep per school-week, with a rise after so many years. The weekly salary, allowance for keep, and rises are different in the various provinces. In each municipality in the country, at least one of the masters shall be provided with house, pasturage for two cows, and a garden. In 1895, 1,992 masters had free house, and 1,121 of these land as well. The situation of parish clerk, or precentor, in the country churches is to be

combined with one of the regular teacherships of the municipality. In 1895, 910 masters were also parish clerks, with an average income, as such, of 194 kr. The parish clerk's salary and the benefit of free house-room are not included in the above-mentioned average salary (778 kr.). The salaries in the towns vary considerably. The governesses as a rule, receive much less than the masters. In 1895, the highest salary for regular masters in the town primary schools, was 4,200 kr., and the lowest 800 kr.; and for governesses, respectively 1,550 kr. and 600 kr. *Pensions* are granted to retired masters and widows of masters, by the state. The amount of the pension is fixed in each separate case according to circumstances. The pension for masters and governesses is generally fixed at from 200 to 800 kr., and for masters' widows from 100 to 300 kr. A bill for a pensioning law will probably be brought before the Storting during the session 1899—1900. A few municipalities, especially towns, also grant pensions to their masters.

C. THE PRIMARY SCHOOL BUDGET.

The expenses of the primary school are paid by the municipalities, the counties and the state. In the country, every municipality receives a government grant towards the salaries of its teachers, amounting to $\frac{1}{3}$ (in exceptional cases $\frac{1}{2}$) of the salaries given (allowance for keep included). The town municipalities receive a grant of $\frac{1}{3}$ of the amount of the salaries.

In each county, there is a county school fund, of which $\frac{3}{4}$ are made up by government grants, and $\frac{1}{4}$ is voted out of the county revenues. Various expenses are defrayed, by permission of the County Council, out of the county school fund, viz. the additional amounts for the raising of teachers' salaries for long service, donations towards the erection of school-buildings (with or without master's house), for providing teachers with land or compensation for the same, for educational apparatus, for aids to poor municipalities where the school expenses, on account of local circumstances, are disproportionately large, for substitutes in any case of long illness, for continuation schools and artisans' schools (*arbeidsskoler*).

What is required over and above the government grants (in the country, the government grants and the county school fund), to meet the expenses of the primary school is furnished by each municipality in accordance with a vote of the Council.

TOTAL EXPENSES OF PRIMARY EDUCATION.

YEAR.	Rural Districts.	Towns.	Total.
	Kr.	Kr.	Kr.
1870 - - - - -	2,091,404	500,992	2,592,396
1880 - - - - -	3,096,889	1,148,770	4,245,659
1890 - - - - -	3,439,029	2,064,782	5,503,811
1895 - - - - -	4,983,304	3,121,955	8,105,259

THE EXPENSES WERE DEFRAIDED.

Year.	By State.	By Municipalities in the Country	By Municipalities in Towns.
	Kr.	Kr.	Kr.
1870 - -	145,832 = 5·62%	1,956,120 = 75·46%	490,444 = 18·92%
1880 - -	884,980 = 20·84%	2,310,295 = 54·42%	1,050,384 = 24·74%
1890 - -	1,098,213 = 19·96%	2,496,817 = 45·36%	1,908,781 = 34·68%
1895 - -	2,124,260 = 26·21%	3,410,462 = 42·08%	2,570,537 = 31·71%

Expenses in connection with the training of teachers (in 1895, 257,227 kr.), pensions (in 1895, 390,077 kr.), inspection, etc., are not included in the above table.

In 1895 the education of every child in the primary school in the country cost on an average 19·60 kr., and in the towns, 47·28 kr., the average for town and country being 24·50 kr. as against respectively kr. 8·84, 21·10 and 10·03 in 1875. The cost of primary education amounted in 1895 to kr. 4·50 per inhabitant.

II. FURTHER EDUCATION ON THE BASIS OF THE PRIMARY SCHOOL WORKING-MEN'S COLLEGES.

The primary school law allows the country municipalities to establish, by means of public contributions, *Continuation Schools* (fortsettelsesskoler) as an optional school for children that have left the primary school, and for older children (14—18). The time of instruction may be extended from 1 to 6 months. The primary school teachers are in charge of the education. In these schools, which are managed by the School Board, the aim is to take up and treat the educational material of the parish school (Norwegian, arithmetic, history, natural science) with the object of opening the pupils' eyes to the claims that life makes upon every one in their sphere of action. In 1896—1897, there were 172 such schools at work, with 2,868 pupils. The schools lasted from 5 to 18 weeks, and the number of classes per week for each school averaged 38, and the expenses kr. 17·07 per pupil.

To meet the needs of the children that have left the primary school for continued instruction, *Night Schools* (aftenskoler) are also held with public and municipal assistance. The subjects are the same as in the continuation schools (principally Norwegian and arithmetic), and the instruction is in the hands of the primary school teachers. While the continuation schools are attended chiefly by children that have just left the primary school (age 15 and 16), the pupils in the night schools are rather older (17—19). In 1898—1899, there were 389 night schools being carried on, with a total of 5,519 pupils. The average number of classes was 60, and the expenses per pupil kr. 3·36.

In most of the counties there are *County Schools* (amtsskoler), one or more. In these schools, the education for a practical life is continued on the lines of the primary school and the continuation school. The county schools are managed by the County School Board, which also appoints the teachers. The arrangement

and plan of the instruction is determined by the County Council with the approbation of the king. The county school course is for two years or one year. They are some of them intended for mixed schools, some for separate courses for each sex. In the mixed and the boys' courses, the instruction, as a rule, lasts for 6 or 7 months of the year. The girls' courses are shorter — 3 or 4 months. Most of the county schools are ambulatory, and move from parish to parish, remaining 1 or 2 years in each place. Of late years, however, several of the county schools have become fixed. The syllabus, as a rule, is the same as that of the primary school, but the aim is a higher one. The girls receive instruction in needlework and, as a rule, house management, and the boys in sloyd and technical drawing. In a few schools, instruction is also given in gardening, agricultural subjects and English. The instruction is being imparted more and more through the medium of lectures.

In addition to the county schools, there are the so-called *People's High Schools* (folkehøiskoler) in several of the counties. At these schools, which are private, special attention is paid to the influencing of the personality of the young men and women, and fostering an affection for their country and mother-tongue. No attempt is made to train the pupils for any particular position in life or examination, but the end aimed at is that on returning to their homes, the pupils may feel themselves at home in whatever sphere of life they are called upon to enter. The pupils live at the school, and make up as it were, a household with the manager's family; and particular attention is given to the intercourse between masters and pupils.

In aid of the county schools, the people's high schools, and private schools with a similar object to that of the county schools, and for studentships for needy pupils at such schools, the state grants thrice the amount voted to the schools by the county fund. Direct government grants are also made to a few advanced people's high schools. A sum of about 180,000 kr. has been voted for the budget-year 1900-1901 to the county schools and the people's high schools, and for studentships for needy pupils in such schools, the corresponding amount contributed by the counties being 60,000 kr. The municipalities in which county schools are held, also provide premises, etc. For the same period, a sum of 32,000 kr. has been voted as a direct government grant (without presupposed contribution from the county) to advanced people's high schools and for studentships for needy pupils at such schools. In the school-year 1898-99, 45 county and people's high schools were being carried on, 9 of them being private. There were 101 masters and 56 governesses teaching at the schools, and the number of pupils was 1,273 boys and 942 girls.

Of late years, adult men and women, chiefly of the working classes, have been instructed in the so-called *Working-Men's Colleges* (arbeiderakademier) in the phenomena of nature and of human and social life, and in the development of human culture and its results upon thought and commerce. The first working

men's college was erected in Kristiania in 1885. Several towns and rural districts have since then followed its lead. In 1899, 35 working-men's colleges were in existence, 10 of them in the country. The instruction is given in the form of lectures (in the evening), with which is associated conversation upon the subject in hand. The lecturers have been scientific men, schoolmasters, military men, doctors, etc. Admission is generally free. The government grant to the working-men's colleges is equal to half what is furnished by the municipality, or acquired in any other way. On the proposed budget for 1900-1901, 23,685 kr. is put down as the amount of the grant to the working-men's colleges.

In addition to the before-mentioned summer courses at the University and the Bergen Museum, the *Public Libraries* may be mentioned in connection with the schools and working-men's colleges. At the present time, the state makes a grant of 20,000 kr. annually to such libraries. Out of this grant, various amounts up to 200 kr. are given to each municipality. In order to obtain the government grant, an equal amount must be procured from local sources. There are about 650 free libraries of from 100 to 10,000 volumes. In several towns there are municipal libraries, among them being the Deichmann Library in Kristiania, numbering about 50,000 volumes, and the Bergen Public Library, with about 80,000 volumes.

III. SECONDARY AND HIGHER EDUCATION.

At the beginning of the century, Norway had only 4 grammar schools or classical schools (*lerde skoler, latinskoler*), in which higher education was given. By degrees others were erected some with "real" courses connected with them, as well as middle-class and "real" schools (*berger- og realskoler*).^{*} The higher public education was re-organised by an act of the 17th June, 1869. By the regulations then introduced, the so-called "*middelskole*" became the school in which was combined instruction both for those who desired a satisfactory general middle-class education, terminating with the *middelskole*, and for those who wished to lay the foundation for a continued higher education. The course was 6 years, for children from 9 to 15. The further education, which, *inter alia*, prepared for the University, was given in "*Gymnasia*," in a 3 years' course, intended for young people of ages from 15 to 18. Some of the gymnasia were classical gymnasia (*latingymnasier*) where Latin and Greek were the principal subjects; some "real" gymnasia (*realgymnasier*), where English, mathematics and natural science occupied a prominent place. The act of 1869 has now been succeeded by the school act of the 27th July, 1896.

The act of 1869 had aimed at a connection between the higher school and the primary school, in such a way that the latter

^{*} In "real" schools, as distinct from "latin" schools, the elements of science, modern languages, and commercial subjects were taught instead of Latin and Greek.

might become a common school for all classes of children during the three first years of their school-life (6-9). The primary school, however, was at that time not so well adapted for this, and in most places therefore, 3 1-year preparation classes were associated with the *middelskole*. As the town primary schools gradually improved, attempts were made in several places to form a connection between the higher and the lower schools, even beyond the first three school years; and by the act of 1896, an organic connection has now been brought about between the secondary school and the primary school in the towns. In accordance with this act, the secondary school builds upon the two first divisions of the town primary school (with voluntary instruction in the second division). The primary school is to be, in general, the common preparatory school for all children for the first 5 years of schooling; at any rate, it is the only government-supported school for children of this age. At present, there are, however, some preparatory schools in connection with private higher schools.

The secondary school is also divided by the act of 1896, into *middelskole* and *gymnasium*. The *middelskole* course is generally 4 years (intended for children between 11 and 15). According to the act, the course must not be made longer, but may be shorter, if the *middelskole* in any place can be connected with the primary school higher up than after the latter's 5th year. The *gymnasium* course is 3 years. The aim of the school is given in the act as follows: "The *middelskole* is a school for children, which, in union with the primary school, gives its pupils a complete, thorough, general education, adapted to the receptivity of childhood. The *gymnasium* is a school for young people, which on the *middelskole* foundation, leads on to a complete, higher, general education, which may also serve as a basis for scientific studies. Both *middelskole* and *gymnasium* shall contribute to the religious and moral training of the pupils, and it should also be their common aim to develop the pupils both mentally and physically into competent young people."

Subjects. In the *middelskole*, instruction is given in the following subjects: Religious knowledge, Norwegian, German, English, history, geography, science, arithmetic and mathematics, drawing, writing, manual work, gymnastics and singing. For girls there is also instruction in domestic economy. In the plan of instruction adopted by the Ecclesiastical Department for the *middelskole*, the division of the weekly lessons is as follows (see the table, next page.)

The law allows the establishment of *middelskoler* in which, either with or without the addition of instruction in other departments, only one foreign language is taught, and where the instruction in mathematics is somewhat restricted.

In the *gymnasium*, the following subjects are to be taught: Religious knowledge, Norwegian, German, English, French, history, geography, science, mathematics, drawing, gymnastics and singing. Manual work may also be included in the syllabus. Latin and Greek, by the act of 1896, are altogether omitted from

Subjects.	Classes.			
	I	II	III	IV
Religious knowledge	2	2	2	1
Norwegian	5	4	4*	4*
German †	6	5	5	5
English ‡	—	5	5	5
History	3	2	3	3
Geography	2	2	2	2
Science	3	2	2	3
Arithmetic and Mathematics	5	5	5	5
Drawing	2	2	2	2
Writing	2	1	—	—
Gymnastics	3	3	3	4
Manual Work	2	2	2	2
Singing	1	1	1	—
Total	36	36	36	36

the subject-list of both the middelskole and the gymnasium, and instruction in these languages is relegated to the University. In exceptional cases, however, instruction may be given for the present in a few gymnasia in Latin, with a proportional restriction in other subjects. Whereas in the middelskole the instruction is common to all the pupils, a gymnasium may be divided into two lines, the language-history line, and the science or "real" line. This division, however, only takes place in the gymnasium's 2nd and 3rd classes, and not in all subjects.

According to a temporarily drawn up plan of instruction for the new gymnasium, the following division of the weekly lessons is suggested:

	"Real" line			Language-history line.			Latin line.		
	I	II	III	I	II	III	I	II	III
Religious knowledge	1	1	2	1	1	2	1	1	2
Norwegian	4	5	4	4	6	5	4	5	4
German	3	3	3	3	3	3	3	3	3
English	4	2	2	4	7	7	4	2	2
French	4	2	2	4	4	3	4	5	—
Latin	—	—	—	—	—	—	—	7	11
History	3	3	3	3	5	5	3	3	3
Geography	1	1	2	1	1	2	1	1	2
Science	4	5	5	4	1	1	4	1	1
Mathematics	4	6	6	4	2	2	4	2	2
Drawing	2	2	1	2	—	—	2	—	—
Total	30	30	30	30	30	30	30	30	30

* In Classes III and IV, one Norwegian lesson is given to writing every other week.

† Alternative — English, 6, 4, 3, 4.

‡ Alternative — German, 0, 6, 7, 6.

Six lessons a week are moreover divided between gymnastics and singing.

In connection with a middelskole, or if there is a gymnasium, with its first class, a one-year's course may be arranged, which gives a complete training for special practical callings, *e.g.*, trade.

The instruction in the middelskole and gymnasium concludes with a leaving examination, called respectively middelskole examination and "examen artium." The holder of an examen artium certificate is entitled to enter his name as a student at the University. The middelskole examination, according to the new law, will be held for the first time in 1900, and the examen artium in 1903.

Inspection. The secondary schools are some government schools, some municipal, and some private. The Ecclesiastical and Educational Department has the supreme management of all the secondary schools. To assist the Department in the inspection of the schools and the arrangement of the leaving examinations, there is a council of education (*undervisningsraad*), consisting of 7 members chosen from men with a practical understanding of higher education. In all hygienic questions, an expert is admitted into the council. Each of the government schools has a board of management consisting of the headmaster of the school and 4 members, one of whom is chosen by the Department, and three by the Municipal Council. This board has to watch over everything that can serve to promote the interests of the school, to nominate to vacant teacherships, to administer the funds and receipts of the school, etc. In many places, the School Board forms the board of management for the municipal secondary schools.

Teachers. In order to be appointed to a permanent teachership in the secondary school, it is generally required that the aspirant shall have passed one of the theoretical teachers' examinations at the University—the language-history or the mathematical-natural-science. Kr. 15,000 has been voted annually of late years for travelling studentships for teachers at the secondary schools, a third of that sum being an extraordinary grant on the occasion of the new law. The courses mentioned in connection with the primary school, for teachers in gymnastics, sloyd, etc., are also intended for teachers in the secondary schools. For the latter especially, holiday courses have been held the last two or three years, at the University, to enable them to meet the increased requirements of the new law. A reform in the training of teachers, chiefly with a view to furnish future teachers with more practical experience, is at hand.

The principals of the government schools (*rektorer*) and the other permanent teachers (second masters, "*overlærere*," and assistant masters, "*adjunkter*") are appointed by the king, and are government officers. The rector's salary is 4,600 kr. + 400 kr. + 400 kr. after 5 and 10 years' service, as well as house. The two oldest rectors also receive a further addition of 400 kr. A second master's salary is 3,200 kr. (with 3 rises of 400 kr.), and an assistant master's salary is 2,200 kr. with 3

rises (400 kr., 300 kr., 300 kr.) after 3, 6, and 9 years' service. The principals and permanent teachers of municipal secondary schools supported by government, are appointed by the Department. When their salary is fixed by the Municipal Council at a sum that is not lower than that of the rectors, second masters, and assistant masters in the government schools, they are designated in the same manner. Years of service as rector, second master, or assistant master are counted the same, whether they are passed in government schools or in municipal schools whose teachers are appointed by the Department. Service in private schools with examination rights is also reckoned in part towards the attainment of increased salary on appointment in the government or municipal schools.

Statistics. The number of government schools amounted, in the school-year 1899-1900, to 14, which all, besides middelskole, also have gymnasium. The number of municipal and private schools that have received the right of holding leaving examinations with the same effect as the government schools, amounts respectively to 42 (3 of them in the country) and 28. During the school-year, there have thus been 84 secondary schools at work. Two of the municipal schools, and 4 of the private schools have gymnasium as well as middelskole. A private Latin gymnasium is attached to one of the government schools. The government schools and most of the municipal schools are intended for the common instruction of boys and girls. Sixteen of the 28 private schools are exclusively for girls, the remainder some for mixed schools, some for boys only.

The municipalities have to provide the government schools with premises, school plant, apparatus, lighting and heating. The rest of the expenses are met by the government grants, the school fees, and, in a few cases, by the schools' private means. Thirty-nine of the 42 municipal schools are supported by government grants. The grant amounts to $\frac{1}{3}$ of the total of the teachers' salaries, and all the additional amounts for long service. The rest of the expenses are covered by the school fees and municipal grants.

In the school-year 1896-97, the most recent of which the statistics have been worked up, all the secondary schools together had 15,729 pupils divided among 847 classes, with 613 masters and 409 governesses. In the above-mentioned year, however, a preparatory school was still attached to most of the middelskoler, and these were still 6-years courses. In 1899, 347 pupils went up for the examen artium, 47 of them being girls, and 2,003 for the middelskole examination, 775 of them being girls.

The education of each child in the government schools in the year 1896-97, cost 282 kr., and in the municipal middelskoler, 124 kr. In 1875-76, the same expenses were respectively, kr. 227.60 and kr. 128.40. In 1895, the total expenses of the government schools amounted to kr. 738,312, 36 per cent. of this being covered by the school fees, 41.6 per cent. by government grants 6.7 per cent. by municipal grants, and 15.7 per cent. by interest on investments and in other ways. In the same year, the total

expenses of the higher municipal schools amounted to kr. 758,292, 53·4 per cent. of this being covered by the school fees, 14 per cent. by government grants, 24 per cent. by municipal grants, and 8·6 per cent. by interest on investments and in other ways.

In addition to the secondary schools, there are some municipal and private boys' and girls' schools without the examination right, in which instruction is given that goes beyond the aim of the primary school. These schools have a freer arrangement than the *middelskoler*, and have, in great part, for their object the higher education of girls. In 1896, there were 65 of these schools, with 306 classes. The number of pupils was 3,707, of whom 2,751 were girls. Two hundred and twenty-four governesses and 107 masters had appointments in the schools.

IV. THE UNIVERSITY. SCIENTIFIC SOCIETIES. MUSEUMS, &c.

Norway has only one University, the *Royal Frederik University* in Kristiania. It was founded in 1811, and began its operations in 1813, with 11 professors, 3 lecturers and 18 students. In 1856, it had 22 professors, 11 lecturers and 650 students, and in 1900, it has 63 professors, 8 "docents," 10 fellows, and between 13 and 14 hundred students.

The teachers of the University are divided among 5 faculties; theology, with at the present time 5 professors; law, with 7 professors and 1 "docent"; medicine, with 14 professors and 1 "docent"; history, philology and philosophy with 21 professors and 4 "docents"; mathematics and natural sciences, with 16 professors and 2 "docents." Each faculty elects a president for 2 years, the dean (*dekanus*). The 5 deans form the academic council (*det akademiske kollegium*) which constitutes the University's board of management, and is immediately under the Ecclesiastical and Educational Department.

The professors are appointed by the king. Their salary is 4,500 kr. per annum, with 3 additions of 500 kr. after 5, 10 and 15 years' service. The 20 oldest professors moreover have an addition of 600 kr. The "docents" are also appointed by the king. Their salary is from 2,500 to 3,500 kr. The fellows, who have only a limited amount of lecturing to do, are appointed for 1 year at a time by the council, and are paid from 1,200 to 1,400 kr. Foreigners can also be appointed to professorships at the University.

As already mentioned, the leaving examination at a gymnasium, *examen artium*, entitles the successful candidate to enter his name as a student at the University. The instruction there is free. Fees are only paid for permission to enter for the various examinations (from 20 to 40 kr.). Before the students can go up for any of the University degree examinations, they must have passed a preparatory examination called "*examen philosophicum*." In this examination, philosophy is a compulsory subject; the 5 others may be chosen by the candidate (science, languages, history, mathematics, etc.). The time of preparation for the *examen philosophicum* is 2 or 3 terms.

The average time required to work up for the various examinations is: 9 terms for theology, 8 for law, 14 for medicine, 10 for philology, and 10 for "real" students.*

In 1899, the number of students in the various branches of study was as follows: theology, 70, law 270, medicine 330, philology 45, "real" students 40, mining students 3, students for the *examen philosophicum* about 600, total about 1,360.

Since 1882, 260 female students have matriculated at the University, 53 of them having passed the Latin artium, and 207 the Real artium. Twenty-four women have gone up for examinations at the University, 16 of them having taken medicine.

The expenses of the University for the finance-year 1900-1901 were put down at kr. 713,025. Of this amount, 600,000 were defrayed by government moneys, the remainder by the funds etc. of the University.

There are various collections, laboratories and scientific institutions connected with the University, among them being the University Library (about 350,000 volumes), which is also the National Library, and whose reading-room is open to anyone for 7 hours daily; the Botanical Gardens, the Historical Museum, the Astronomical and Magnetic Observatory, the Meteorological Institute, and the Biological Marine Station at Drøbak.

The National Hospital and the Lying-in Hospital, both government institutions, whose head physicians are almost all University professors, are utilised as University clinics.

The practical training of theological students is carried on at the practical theological college connected with the University.

Two institutions for the promotion of science are the *Royal Literary and Philosophical Society* (Det kongelige norske Videnskabers Selskab) in Trondhjem, founded in 1760, with a library of about 70,000 volumes, and the *Literary and Philosophical Society* (Videnskabselskabet) in Kristiania, founded in 1857, with which is associated the *Fridtjof Nansen Fund for the Promotion of Science*, whose capital at present amounts to about kr. 450,000.

The *Bergen Museum*, founded in 1825, is a centre about which is gathered no little scientific life in the western part of the country. The museum possesses valuable collections, especially of natural history specimens, a considerable scientific library, a biological station with laboratories and aquaria, etc. Annual summer courses are held at the museum for primary school teachers, and in the winter, lectures to working men. There are also museums in Tromsø, Stavanger and Arendal, with natural history and historical-antiquarian collections.

For the preservation of ancient Norwegian monuments, there is an association founded in 1844, and supported by a government grant. The *Norwegian National Museum*, Norsk folkemuseum, (founded in 1894 in Kristiania), collects and exhibits everything throwing light upon the cultural life of the Norwegian people. The *Industrial Arts Museums* in Kristiania, Bergen and Trondhjem, whose object is to promote the Norwegian industries with regard to tasteful and practical form, possess valuable collections.

* i.e., students of natural science subjects and mathematics.

The *Archives of the Kingdom* come under the Ecclesiastical and Educational Department. The state archives are in Kristiania; Bergen and Trondhjem each have their diocesan archives.

Sums are voted annually by the state to enable scientific men and artists to travel abroad. Various bequests have also been made towards the support of artists and scientific men, *e.g.*, Houen's Bequest (about 370,000 kr.), Benneche's Bequest (about 80,000 kr.), Schæffer's Bequest (about 60,000 kr.), Finne's Bequest (about 80,000 kr.), Henrichsen's Bequest (220,000 kr.), and Hans Gude's Bequest (about 40,000 kr.).

V. SCHOOLS FOR DEFECTIVES. WAIFS AND STRAYS.

The law of 1881 for schools for defectives, and subsequent additional laws, regulate the instruction for *deaf, blind, and imbecile* children. At the head of the defectives' school affairs is a director under the Ecclesiastical and Educational Department.

In book subjects, the aim of the schools for defectives is the same as in the primary school, and in addition the pupils are educated for a practical life. The school course is, as a rule, 8 years. Deaf children are admitted at the age of 7, blind children at the age of 9, and imbeciles, at present, at the age of 14 or 15. The state bears the expenses of their education, while the cost of maintenance of poor children during their stay at the school is borne by the municipalities. The government expenditure on education in 1898—99, amounted to about 300,000 kr., or about 350 kr. per child. The cost of maintaining each child may be put down at the same amount.

There are 5 schools for deaf children, all government institutions. Two of these are at the same time destined to admit new pupils, and to be division schools for the most intelligent children (A-children), 2 are division schools for less intelligent children (B-children) and 1 is a mixed school for the least intelligent children (C-D-children). Children are admitted every year. The instruction is given by the articulation method. In the school-year 1898—99, there was a total of 308 children at these schools, with about 60 masters and governesses.

The state has 2 blind asylums, and also supports a private school for blind adults. In 1898—99, there were altogether 130 pupils in the blind asylums, with 20 teachers of both sexes.

There are 3 asylums for imbecile children, all of them government institutions. The boarding-school at one of them is carried on by private means, but will probably be taken over by the state in 1901. In 1898—99, the number of pupils in these asylums was 420, with 67 masters and governesses.

There is an industrial school in Kristiania for deformed persons, which had 44 pupils in 1898.

By an act of the 6th June, 1896, entirely new regulations were introduced with regard to the treatment of destitute and criminal children. The law is only partially carried out, as the necessary institutions had first to be provided. In the course of the year 1900, however, the new regulations will probably be in full force.

Their main features are that the criminal responsible age shall be raised from 10 to 14 years, and that young criminals below the latter age, instead of being punished, shall be treated in a different, more considerate manner, especially in having their education attended to. Children who commit crimes after having completed their 14th year, on the other hand, are liable to punishment. But as long as they are under 16, besides, or instead of the punishment, educational measures may also be employed with them. The act, however, does not merely include those children who have already entered upon evil courses. It has been thought that the care of the state should also be extended to children, who though they have not yet gone so far, may be expected to become burdens to society in the form of lazy idlers, criminals and convicts, if they are not brought under better influences in time. The act ordains, therefore, that children of this kind, under certain conditions given in detail, shall also be placed under the care of the state.

The authority to decide what is to be done with a child, whose condition makes the interference of the state necessary, is as a rule placed in the hands of the so-called Board of Guardians (*vergeraad*). A board of this description shall be formed in every municipality, and consist of a judge and a clergyman, and five members chosen for a period of two years by the Municipal Council, one of them being a medical man living or practising in the municipality, and one or two women. The most important of the measures which the Board of Guardians can adopt with regard to the child is that he may be removed from his parents or guardians, and placed in a trustworthy, honest family, or a Home, or some other similar institution, a reformatory school or a "skolehjem." If necessary the parents may be deprived of their parental authority. If the Board of Guardians consider that the child may be left with his parents, they may administer both to him and his parents a serious admonition, and, in certain cases, may inflict upon the child a suitable chastisement.

Children that are not considered to be wholly depraved are generally placed in some family or Home, where they are brought up under the supervision of the Board of Guardians. Children that do not attend school, or that behave badly there, may, by the decision of the School Board, be placed at a reformatory school, where they remain for a period not exceeding 6 months. The reformatory school may be erected by a single municipality or by several in conjunction. Its plan must be approved by the king. Children that are so depraved morally, that their attendance at the ordinary school would expose other children to harmful influences, shall as a rule, be placed by the Board of Guardians in a skolehjem. There shall be two kinds of such skolehjem, one more strict for specially depraved children, and one more lenient. The state shall see that the necessary institutions are provided. The stricter kind of skolehjem is to be erected by the state, for boys and girls separately. On Bastø, near Kristiania, one to accommodate 150 boys is at present in course of erection. A similar establishment for girls is to be founded near Kristiania. The

more lenient institutions may be private or municipal, if they are arranged as the law requires. Three previously existing private and municipal educational institutions for destitute boys will probably be included in the new organisation of reformatory education as more lenient skolehjem, "Toftes Gave" on Helgøen near Hamar, Ulfnesøen near Bergen, and Falstad near Trondhjem.

The charge undertaken by the state of children that are removed from their parents, ceases when the cause for it ceases, and as a rule, is not continued after the child has completed his 18th year. Children that have been placed in reformatories of the stricter kind, may, however, be kept there until they have completed their 21st year.

The supervision of this class of children falls to the lot of the Ecclesiastical and Educational Department. The cost is divided between the State and the municipalities.

VI. SPECIAL SCHOOLS.

Technical Schools. There are 3 schools in our land whose aim it is to impart the theoretical, technical instruction required by those who have decided upon a technical, or other practical occupation. They are in Kristiania, Bergen and Trondhjem. The school in Trondhjem is divided into 4 sections, viz. engineering, architecture, machinery and chemistry. The school in Kristiania has only the last 3 of these divisions, and the school in Bergen only the last 2. The school-course in Kristiania and Trondhjem is 4 years, in Bergen 3. To obtain admission to any of the schools, the applicant must have passed the middelskole examination, which is generally done at the age of 15. In the school-year 1898—99, the number of pupils in these schools was respectively 196, 83 and 153, 432 in all, and the number of teachers respectively, 23, 12 and 21, 56 in all. The schools are municipal, but are under the supervision of the Ecclesiastical and Educational Department. The municipalities provide the premises and school-plant, and furnish (after subtraction of the school fees — 100 kr. per annum per head —) $\frac{1}{3}$ of the sum required to meet the expenses, the state furnishing the remaining $\frac{2}{3}$. For 1898—99 the expenses at the three schools were respectively about kr. 85,000, kr. 40,000 and kr. 79,000, plus the cost of the premises and plant, about 13,500 kr. for all schools.

In the present school-year, 1899—1900, there are 14 technical night schools. The object of these schools is to give the technical information and proficiency most necessary for handicrafts and other similar industries. For admission to the school, it is required that the applicant shall have completed his 14th year, and can read and write and understand addition, subtraction, multiplication and division of whole numbers and fractions. The course is 3 years. In most of the schools, the school-year lasts 8 months, with 2 hours' instruction on each of the first 5 working days in the week. In the school-year 1897—98, there were 13 technical night schools, with a total of 2,443 pupils and 239 teachers. The school fees amount to from 2 to 5 kr. a year. The arrangement with regard to the supervision and the

division of the expenses between the state and the municipality is the same as for the technical schools. In 1897-98, the expenses of the technical night schools amounted to about 111,000 kr.

In Kristiania, there is also a technical elementary day school with the same object as the technical night schools. The course is 6 months, with 6 hours' daily instruction, and a 2 months' supplementary course. In 1898-99, the school had 46 pupils and 6 teachers. The expenses amounted to about 18,000 kr.

The state further supports a mechanical school in Porsgrund, a school for wood and metal industries in Bergen, a technical school for mechanics at Horten, intended especially for future pupils in the naval mechanical workshop, and the mechanics' corps, and some engineering schools.

In February of 1900, a government bill was brought before the Storting for the erection of a technical high school.

The *Royal Art and Industrial School* in Kristiania was founded in 1818. According to the arrangements of 1888 now in force, the object of the school is to train artists and mechanics and teachers in the special subjects of the school. At the school, which is managed by a director, and has 13 second masters, 5 under, and a few assistant masters, instruction is given in free-hand drawing, construction, ornament, modelling, architectural drawing, special drawing for handicrafts, and decorative painting. Lectures are also given in perspective, statics, arithmetic and geometry. No one is admitted as a pupil before having completed his 14th year. The day school (8 months' course) was attended, in 1898-99, by 284 pupils, distributed among 8 classes. The evening school (also 8 months' course), in the same year was attended by 871 pupils, distributed among 17 classes, 8 of which were parallel. Ninety-seven of the day-school pupils, and 54 of the evening school, were women. The expenses of the school in 1898-99, were 81,253 kr., of which 53,285 kr. were furnished by the state, 20,000 by the Kristiania municipality, and the rest by school fees.

In 1899, there were 14 public drawing schools or night schools outside Kristiania. They are chiefly intended for mechanics' apprentices. The government grant to these schools is contingent upon the providing of premises and fittings by the municipalities, and the contribution by them of an amount equal to that contributed by the state. The number of pupils is from 40 to 90 in each school.

Industries and Handicrafts Schools. In the present school-year, 1899-1900, there are 9 female industrial schools supported by government, 5 municipal and 4 private. The most important of these is the Female Industrial school in Kristiania, where plain sewing, dressmaking (some tailoring), weaving and fine needlework are taught. The course lasts 1 year, although there are also courses of shorter duration. In the school-year 1898-99, there were 277 pupils in the school, 97 of whom were in the twelve-months' course. The other schools are, in the main, formed upon the pattern of this one. The state moreover gives support to

domestic industry associations in the larger towns. Besides schools for domestic industries and courses in the towns for adults and children, these associations also give courses in the rural districts in general domestic industry subjects (weaving, basket-making, wood-carving, etc.). Further may be mentioned H. Frølich and Mrs. Frølich's school of domestic industry, in Liadalen, near Kristiania, which also receives support from government.

There is a government-supported *Music and Organ School* in Kristiania. In 1898-99, it had 400 pupils and 26 teachers.

There are private *Mercantile Schools* in several towns. In Kristiania the municipality maintains a mercantile gymnasium, with two one-year classes, which builds upon the middelskole foundation. In 1898-99, this gymnasium had about 80 pupils and 16 teachers.

Among other special schools may be mentioned military schools (the military college and the military high-school in Kristiania, the naval academy at Horten), agricultural colleges (the agricultural high-school at Aas near Kristiania and agricultural schools in most of the counties), seamen's schools in the larger towns, forestry schools, obstetrical schools in Kristiania and Bergen, a central gymnasium in Kristiania, a fisheries school at Bodo, etc.

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B.—EXTRACT FROM CHAPTER ON AGRICULTURE.

BY G. TANDBERG.

In the course of the last twenty or thirty years the state has by several measures tried to benefit agriculture. Such measures are under the supervision of a managing director working under the Department of Agriculture. Public grants for the advancement of husbandry may be divided into the following five chief items: the agricultural budget properly so-called, the Agricultural College, veterinary matters, the allotment authorities, and the Royal Society for Norway's Welfare.

The *agricultural budget* is balanced with an expense of 800,000 kroner, including the salaries of a staff of state functionaries, grants in favour of agricultural, dairy, and horticultural schools, laboratories of different kinds, contributions to the agricultural societies of the counties, etc.

The *Agricultural College*, since its establishment in 1859 has been connected with the model farm at Aas near Kristiania. Up to the year 1897, advanced instruction was here given only to agriculturalists, but in the above-mentioned year the school was enlarged so as to become also a college for gardeners, dairy farmers, surveyors and foresters. The Agricultural College is managed by a director, and the staff of teachers consists of nine professors and ten instructors and assistants. The annual state contribution on the ordinary budget amounts to about 100,100 kroner.

Civil *veterinary matters* are also managed by a director, who is at the same time the manager of the veterinario-pathological laboratory of the state. The state and county veterinarians are under his guidance, as also the public tuberculin examinations, the courses of instruction for veterinarians, quarantine stations, etc. Norway has not as yet a separate veterinary college, but the establishment of such an institution is under discussion. The annual government grant to veterinary institutions amounts to about 130,000 kroner.

E D U C A T I O N

I N

S W E D E N.

The following report is in large measure a summarised translation of the work entitled "Enseignement et Culture Intellectuelle en Suède" issued in connection with the Paris Exhibition of 1900 by the Swedish Government.

EDUCATION IN SWEDEN.

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IX.—SWEDISH GYMNASTICS.

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- Note on the Composition of the Local Elementary School Authority in some of the Larger Towns of Sweden.

EDUCATION IN SWEDEN.

INTRODUCTION.

Swedish education, a description of which is given in the following pages, enjoys a high reputation for efficiency, and presents several features of special interest to the foreign student. Among them may be named (1) the importance assigned to manual training in primary education, (2) the strong tendency (noticeable throughout Scandinavia) to remove Latin from the earliest stages of the curriculum of secondary schools, and to postpone the beginnings of classical study till the pupil is about fifteen or sixteen years of age, and (3) the practice of subsidising private effort in education on condition of Government inspection attesting efficiency. Cordial acknowledgment should also here be made of the great benefit which many English teachers have received from the instruction in sloyd given at the Government seminary at Naäs.

The foundations of the present system of Swedish education were laid in the period which followed the Reformation, and its close connection with the Lutheran Church is to this day one of its most characteristic features. The high standard attained by popular education now and in the past is in great measure due to the Church and the clergy, and at the present time, the ties which bind education to the Church are not considered a serious disadvantage by the teaching profession. But owing to the unusual religious uniformity of the population, Sweden can hardly be regarded as a normal instance in this matter. In 1890, out of a total population of 4,784,000, 4,735,000 were returned in the census as belonging to the Established Lutheran Church (44,000 out of the 49,000 dissenters were Baptists, Methodists, etc., 3,000 were Jews, and 1,390 were Roman Catholics). And this uniformity is apparently of long standing, for early in the 17th century a foreign officer in the Swedish service extolled the Swedes for having "one king, one religion and one physician."

Another characteristic of Sweden is the insignificance of the urban as compared to the rural population (in 1890 the entire urban population was only 778,000), in consequence of which the educational system is specially adapted to meet rural needs, instead of being, as in most countries, almost exclusively modelled on the requirements of the towns. Examples of this are the people's high schools, which take advantage of the long winter leisure to hold their courses, and the peripatetic schools.

The church and the school, as well as public health and poor law administration, are in Sweden the province of the department for ecclesiastical matters and public instruction. The right of legislation on these subjects, in all cases involving an appeal to the public treasury, belongs to the Government in cooperation with the Riksdag, but in matters of organisation, not affecting finance, such as school codes and management, it is the constitutional prerogative of the Government alone, being

part of the restricted legislative powers in economic matters which the constitution reserves to the crown. These powers are regulated, and therefore constantly modified, rather by custom than by strict definition, and in actual practice they are more and more rarely exercised, the Government constantly consulting the Riksdag even on matters in which it is constitutionally independent, so that at the present time no step of any importance is decided on without the Riksdag's consent.

The department for ecclesiastical matters and public instruction is divided into four offices, two of which are devoted to educational affairs; one to primary, and one to secondary instruction.

Each of the twenty-four counties (län) into which Sweden is divided has its county council (landsting), presided over by the governor of the county, and each commune and municipality has its communal or municipal council respectively, as well as a parish council of which the pastor is *ex-officio* chairman, and which has the control of ecclesiastical matters and primary education. In each of the twelve dioceses the bishop and the diocesan chapter are the supreme educational authority.

Each commune and municipality also constitutes a poor law district with a poor law board, which is bound to support all destitute children under fifteen years of age, as well as the aged and infirm poor.

The total expenditure on national education in 1895 has been estimated by Mr. Arosenius as follows:—

	Kr.*
Primary instruction (including schools for abnormal children) - - - -	16,075,000
Girls' and boys' secondary instruction - -	5,162,000
Universities and university colleges - -	1,492,000
Technical instruction - - - -	921,000
Total - - -	23,650,000

These amounts include state and municipal contributions to private establishments, which, aided and supervised by the State, import into the national educational system a desirable elasticity and diversity, and play an important part in it. At the present time the total expenditure must certainly amount to 27,000,000 kr. (between 5 and 6 kr. per head of the population), and this does not include expenditure on specialised professional instruction, such as military or agricultural training.

I.—PRIMARY INSTRUCTION.

In Sweden, as in other countries, education began by being purely traditional, that is to say, each generation transmitted orally to its successors the sum of its personal experience. Instruction, in its proper sense, belongs to a later stage, in which again the primary school is a more recent development than the higher schools. The ecclesiastical law of 1686 was the first

* A Swedish krona is equal to about 1s. 1½d.—about 18 kr. mak: £1

step towards a national organisation of education; its aim was to ensure to all children a sound religious education, and it imposed on the sacristan the duty of teaching the children of the parish to read, and on the priest that of examining them in the catechism; it also made admittance to the Communion and to marriage conditional on the attainment of a certain proficiency. Thanks to these measures peasants who could read were, even at that date, not rare in Sweden, but, of course, the amount and quality of instruction, depending, as it did, on the personal character of the pastor, was very unequal and varied from parish to parish. In the eighteenth century the evangelical revival, owing to the capital importance it attached to Bible study, did much to spread a knowledge of reading amongst the people, and, indeed, pietists have always borne in Sweden the significant name of "readers." Other currents of intellectual and moral opinion in the eighteenth century contributed to the furtherance of a desire for popular education, but they did not produce any comprehensive organisation of primary schools.

In the nineteenth century the nation awoke to the necessity of organising a national, compulsory system of elementary popular instruction, and, after controversies which raged for more than one decade, the principle of compulsion was adopted in 1842 by the first Swedish primary instruction act, the principles of which have been practically worked out during the succeeding half-century. The zeal and indefatigable industry displayed by Count T. Rudenskiöld in the cause of elementary instruction during its initiatory period have earned for his name a grateful survival in the memory of the Swedish people. It was in great measure his influence which prompted the legislative activity by which the Riksdag laid the foundations of the actual organisation during the years 1856 to 1858; measures which owed their execution to the energetic efforts of F. F. Carlson, Minister of Education, from 1863 to 1870, and again from 1875 to 1878.

As to the results of primary education in Sweden, it may be stated that all conscripts for military service can read (the trifling percentage, one illiterate per thousand of the population, being due to a few Finns from the extreme North), so that from this point of view, Sweden is at least as advanced as any other nation, and is in line with Germany and Denmark. But to be able to read is not the last word of education; and, in fact, in 1897, though 69·3 per cent. of the conscripts could read *well*, 33·6 per cent. could only read *passably*, so that there is room, even in the elementary matter of reading, for an improvement, which is, indeed, actually taking place, for in 1897, 69·3 per cent. of the conscripts could read well, as against 52·4 per cent. in 1875.

The Organisation and Curriculum of the Primary School.

The Primary School in Sweden is essentially a municipal or communal institution, but it receives a considerable State

Inspection of
Primary
Schools.

grant, and is subject to supervision by the central government, and by the ecclesiastical authorities. As a rule each parish constitutes a school district, of which the deliberative authority is the parish council, and the executive a school board consisting of the pastor (*ex-officio* president), and at least four other members, men or women, chosen by the parish council. Once, at least, in each school year the president of the school board is bound to convene a meeting of its whole teaching staff, for the discussion of all local scholastic matters. The school board draws up the school time tables on the basis of the government code (normalplan), and is responsible for the immediate supervision of all the primary schools in its district, for which inspection it may, with the consent of the parish council, employ a sufficient number of head-masters (*öfverlärare*) and a communal inspector specially attached to the district. The diocesan chapter, in its capacity of supreme educational council, has the right to supervise the management and working of all the schools in the diocese, while the central government exercises its control through the inspectors of elementary schools, who are appointed for a period of six years, and of whom there are at the present time forty-seven allocated to districts of varying extent. The inspectors report any defects in instruction to the district school council, and should the report be disregarded, may refer the matter to the diocesan authorities, to whom they also report annually during the first five years of their appointments. At the end of their sixth year of office they send in more detailed reports to the Education Department. These reports are printed and circulated amongst the diocesan chapters and school councils. When new school buildings are erected, a Government inspector has to advise as to choice of site, plan of the building, and the provision of adequate play-ground, as well as to examine and report on all appeals for Government grants and attest the fulfilment by the school in question of the necessary conditions.

Different
Grades and
Sub-
Divisions
of Primary
Schools.

Each school district must contain at least one elementary school, and, wherever practicable, each school should have two divisions—a junior school (*småskolan*) and a senior school (*folkskolan*). Many districts have continuation classes, and a small number have higher grade schools for those who have finished their primary school course. In certain localities which are too far off for the children to attend the local primary school the Government permits, as a temporary expedient, the establishment of lower grade primary schools, with a limited staff and curriculum. Peripatetic schools are similarly a provisional arrangement for districts where the financial resources or the physical conditions preclude the establishment of a stationary school. In many places the school district is divided into two or more sections (*rota*) and the school migrates from one to another, dividing the school year between them. However, the number of peripatetic schools is steadily decreasing in favour of stationary schools.

The following table gives the number of primary schools in existence for a series of years:—

Years.	Total Number of Schools.					Of these were Peripatetic.				
	Superior Primary Schools.	Primary Schools.	Inferior Primary Schools.	Junior Schools.	Total.	Primary Schools.	Inferior Primary Schools.	Junior Schools.	Total.	Peripatetic Schools.
In 1876 - - -	12	3,749	770	4,239	8,770	962	301	2,197	3,460	39·3
1876-80 - - -	12	3,877	820	4,406	9,115	938	327	2,176	3,441	37·8
1881-85 - - -	13	1,162	997	4,617	9,789	867	430	2,044	3,341	34·1
1886-90 - - -	11	4,433	1,191	4,713	10,348	803	540	1,803	3,146	30·4
1891-95 - - -	12	4,633	1,382	4,891	10,918	745	579	1,640	2,964	27·1
In 1898 - - -	15	4,879	1,614	5,205	11,713	688	670	1,416	2,774	23·7

School Year. According to the code, instruction must be given for thirty-four and a half weeks in the year in every school. But this does not necessarily mean that each child must be under instruction for this period. A child can, of course, only attend a peripatetic school for such a portion of the school year as the school devotes to its district, but also in the stationary schools the school year is often sub-divided between different groups of children, different classes being taught at different periods of the year, or on alternate days of the week; so that in actual practice many Swedish children are only under instruction for four months of the year.

School Age. The school age begins on the completion of the child's seventh year, and ends with the completion of his fourteenth year, but even on the expiration of the full time of his attendance he is not exempt unless he has attained the required standard. Children who are being educated at any public or private institution, giving similar instruction to the primary schools, are exempt from attendance at the public schools, and the school board may also exempt children who are being educated at home, provided they consider the parents or guardians competent to manage their children's education.

It is the duty of the school board to enforce the obligation of parents and guardians to educate their children. Children must not be kept away from school by their parents or by any employment, and employers of children of school age must so arrange their hours that they do not interfere with the school time. If parents cannot provide their children with the necessary food and clothing, they must apply to the poor law authorities. Parents or guardians who neglect to send their children to school are first warned by the Board, but if this has not the desired effect, the children may be removed from their control and maintained elsewhere at the parent's expense.

Curriculum. The curriculum of subjects for the primary school course and the standard of proficiency to be attained are fixed by the Government Code. The normal course in the junior school is two, and in the senior school four years, with a maximum of thirty-six school hours in each week.

The code makes the teacher responsible not merely for the *instruction*, but for the *education* of the children, in which task he should, as much as possible, enlist the co-operation of the parents.

The curriculum consists of:—

**Compulsory
Subjects.**

Religious Knowledge.—Stories from the Old and New Testaments; Luther's Short Catechism, with the authorised comments; from 50-80 chosen verses of Psalms; reading of one or two of the New Testament books.

Mother Tongue.—Reading aloud; explanation of the reading lesson; repetition of a piece read by the class; writing; written narratives, or simple descriptions; sufficient instruction in grammar for the Swedish course; spelling.

Arithmetic.—The four rules, with whole numbers and fractions; easy problems.

Geometry.—Definition and mensuration of lines, angles, triangles, quadrilaterals, circumference, and rectangular solids.

Geography.—General notions of physical geography; geography of Sweden, and in less detail of the other chief civilised countries.

History.—Narratives from national history.

Physical and Natural Science.—Description of the most important natural objects; structure of the human body, its principal functions, and how to preserve it in health; lessons on celestial bodies, and on the chief natural phenomena.

Drawing.—Easy linear and freehand drawing.

Singing.—Selected psalm tunes and songs: easy exercises in notes and rhythm.

Gymnastics.—Jumping and marching exercises without apparatus, and if possible simple gymnastics with appliances.

Gardening.—The culture of ordinary flowers and vegetables, shrubs and trees; grafting.

Manual Work (slöjd).—For boys and girls.

Domestic Economy.—For girls. Both these enjoy an increasing popularity of late. In many schools, school kitchens (*skolkök*) have been established.

Voluntary
Subjects.

The Government Code fixes no syllabus of subjects for the continuation classes of the primary schools, nor for the higher grade elementary schools so that there is considerable variation amongst schools of this class. So far as our information goes, the following subjects, amongst others, would appear to be generally taught.

Mother Tongue.—Reading of selected extracts from Swedish classics, with short notices of the authors; essays; main principles of Swedish grammar.

Arithmetic.—Accounts; introduction to algebra, simple equations.

Geometry.—Three first books of Euclid.

Geography.—Physical, political and economical geography of Sweden completing the primary school course; international commerce and its chief channels; climate, flora and fauna of the different regions of the globe.

History.—Broad outlines of universal history with special attention to the history of civilisation, and the place occupied by Sweden in history; political constitution of Sweden.

Natural Science.—Main principles of chemistry and physics in their practical application: hygiene.

Sloyd and domestic economy are also taught, and in some schools, modern languages (German or English).

Under certain circumstances, for instance, extreme poverty of the parents, children may be exempted from school attendance on the attainment of what is known as the "minimum" standard. This comprises:—

Minimum
Standard.

Religious Knowledge.—Bible history and such a knowledge of the catechism as will enable the child to follow the preparation for Communion.

Mother Tongue.—Reading aloud ; repetition of what has been read ; readable hand-writing and spelling of the most common words ; written expression of a few simple ideas.

Arithmetic.—The four rules with whole numbers ; the most important practical problems ; some idea of addition and subtraction of decimals ; definition and designation of fractions.

Singing.—(Except for pupils completely devoid of musical facility) songs and psalm tunes.

Compulsory continuation classes for children leaving from this minimum standard are held at the schools, and attendance at them is enforced by the School Board. Their syllabus includes :—

Religious Knowledge.—Reading of a book or section of the Bible ; Luther's short catechism.

Mother Tongue.—Written themes (a narrative or description or ordinary business letters) ; oral exercises.

Arithmetic.—Problems in the four rules with whole numbers and fractions ; some notions of book-keeping.

Geometry.—Definition and mensuration of polygons, ellipses and a few simple solids.

Drawing.—Exercises in connection with the geometry and sloyd lessons.

History.—History of Sweden.

Natural Science.—Minerals ; simple notions of physical geography ; a little elementary physics.

Teachers.

There are two classes of primary school teachers ; senior, who teach in the upper division, and junior, who teach in the lower division of the schools. The senior teachers may be of either sex. The junior teachers are almost exclusively women. The legal privileges and duties of teachers of both sexes are fairly equal.

Appointment of Teachers. Teachers are appointed by the parish councils. The school board examines candidates, and submits three names in order of merit to the council for election. Teachers can only be dismissed for incapacity or negligence in the discharge of their duties, or for seriously improper conduct, and then only after a preliminary warning. They may appeal against the warning or the dismissal to the diocesan chapter, and in the last instance to the Government.

In each school there must be at least one fully certificated master or mistress, who may be assisted by uncertificated assistant teachers, by certificated teachers undergoing a training course in the school, by special teachers for practical training (though this instruction is generally given by the ordinary teachers), and in the junior division by junior teachers.

Training. There are at present twelve training colleges for teachers

seven for men, and five for women, each of which has a complete primary school affiliated to it as a practising school (*öfningsskola*) with a full teaching staff. The training college staff consists of a rector and at least four assistants, besides special teachers for drawing, music and singing, gymnastics, gardening and arboriculture, and sloyd. In the women's colleges at least one assistant and the whole staff of the affiliated school must be women; and music, singing, gymnastics, and manual training must be taught by women. Normal school teachers rank with gymnasium professors in capacity, titles, and remuneration.

A sufficient acquaintance with the subjects taught in the primary school is a necessary qualification for admittance to a training college. Students are admitted on the completion of their sixteenth year, and the course lasts four years. 13·8 per cent. of the total number of working hours is devoted to Swedish, 13·2 per cent. to religious instruction; mathematics, history, and geography occupy 9·2 per cent. each; theory and method of teaching, 7·9 per cent.; natural science, 7·2 per cent.; and practical training in teaching, 6·6 per cent.; writing, 2 per cent.; drawing, 5·9 per cent.; music and singing, 7·9 per cent.; gymnastics, 7·9 per cent.; sloyd, 7·2 per cent.; and gardening, 2 per cent. The instruction is gratuitous.

Training
College
Curriculum.

No one can obtain a primary school-teacher's certificate without passing the examination held at the end of the training college course. Junior teachers must pass an easier examination, which may be taken at the end of the second year of the training college course, or after training at special colleges, where the course lasts at least eight months, and which have only a junior school attached to them.

The minimum salary of a senior certificated teacher (master or mistress) is 600 kr. for the first five years' service with increments of 100 kr. for each succeeding period of five years up to 800 kr., besides free lodging, fuel and forage for a cow, or an equivalent money allowance. There are special payments for any work beyond the eight months legal school year as well as for extra classes taken during the school year. Where, as in most of the towns and often in country districts, the municipal or communal authorities give extra allowances, the masters generally receive a larger total remuneration than the mistresses. Every certificated teacher has a right to a pension of 600-750 kr. from a pension fund to which the school district has to pay an annual contribution, and all must contribute to an insurance fund for widows and children. Junior school teachers have smaller salaries, and receive smaller pensions.

Pensions.

Teachers have founded several private associations for the promotion of the interests of the profession and of education generally. The largest, with 6,000 members, is the "Sveriges allmänna folkskolelärareförening."

Teachers'
Associations.

Number of Primary School Teachers and Pupils.

Years.	Average Population.	Teachers. per 10,000 Inhabitants.	Teachers.		Of which in (1.) Senior Schools.		Pupils.	
			Men.	Women.	Men.	Women.	Total.	Number per Teacher.
In 1876 -	4,407,000	9,627	4,926	4,701	3,648	592	634,400	65.9
1876-80 -	4,500,000	10,211	5,003	5,208	3,796	688	636,500	63.3
1881-85 -	4,605,000	11,738	5,155	6,583	4,057	1,066	653,132	55.6
1886-90 -	4,742,000	13,065	5,362	7,703	4,332	1,471	685,655	52.5
1891-95 -	4,832,000	14,296	5,516	8,780	4,535	1,881	706,903	49.4
In 1898 -	5,036,000	15,907	5,641	10,266	4,800	2,438	740,007	46.5

(1.) Special instructors of gymnastics, singing and manual work are not included in these two columns.

Finance.

The primary schools are absolutely free, and their expenses are shared between the school district and the central government. The district has to provide and maintain the buildings, furniture, teaching material and apparatus, and to clean and heat the school, it also contributes annually to the teachers' pension fund, and pays the teachers' salaries, towards which, however, the Government makes a very considerable grant. Besides this, the Government pays a heavy annual contribution to the pension fund (at present it amounts to 570,000 kr.) and bears the whole expense of the training colleges and of the inspection of the schools. (*See table, page 108.*)

The state contribution to primary education in 1898 amounted to 5,000,000 kr. The Education Department sends to each district a complete list of material and apparatus, which may be obtained through the department at a reduced price.

Special Forms of Local Educational Authority.

In Stockholm, Gothenburg, and Malmö all the parishes of each town are united into one school district under a general school board (called in Stockholm, "öfverstyrelse," at Gothenburg "allmän folkskolestyrelse" and at Malmö "skolrad"). In these three towns, and at Norrköping, teachers are appointed by the school boards, and not by the parish councils. At Gothenburg educational affairs are managed by the municipal instead of the parish council.*

The small numbers and poverty of the Finnish and Laplander population in the extreme North of Sweden offer great obstacles to popular education, which the Government makes special efforts to overcome. It has established normal schools—one at Haparanda and one at Mattisudden—to train teachers for the Finnish and Laplander children respectively, and special scholarships are offered to normal school students who speak one or other of these languages and will undertake to teach in these districts. The schools here are either entirely State supported, or receive much larger grants than in other parts of Sweden.

Charitable Institutions in connection with the Primary Schools.

At the Stockholm schools the food prepared by the girls during the cookery lessons in the school kitchen is used to provide dinners for the poorer children attending the school. Sometimes these dinners are free, sometimes a trifling charge is made for them. School Meals.

For many years the larger towns have organised summer baths and swimming lessons for the school children, but lately School Ba

* See Appendix.

Cost of Primary Instruction.

Years.	Estimated Population, based on average for each quadrennial period.	Expenses of Primary Instruction.	Amount per Head of Population.	Specific Expenses.			
				Salaries.	Buildings.	Material.	Sundries.
In 1876 -	4,407,000	Kr. 7,662,158	Kr. 1.74	Kr. 5,097,231	Kr. 1,643,986	Kr. 192,736	Kr. 728,305
1876-80 -	4,500,000	8,544,495	1.90	5,726,835	1,695,868	215,157	906,635
1881-85 -	4,605,000	10,372,260	2.25	7,117,566	1,700,003	236,736	1,317,955
1886-90 -	4,742,000	12,154,629	2.56	8,460,795	1,822,928	224,330	1,646,576
1891-95 -	4,832,000	14,483,222	3.00	9,679,281	2,391,281	315,688	2,096,972
In 1898	5,036,000	18,478,838	3.67	11,504,191	3,857,505	305,830	2,811,312

winter baths have been started, and many schools have very practically arranged bath-rooms, in which all the children can have hot baths every three or four weeks. These baths are gratuitous and not in any way compulsory, and their effect on the cleanliness and health of the children has proved to be excellent.

Many of the larger towns have of late years established holiday colonies in order to send delicate and sickly children into the country during the summer holidays. The colonies, which are generally managed by school teachers, are placed near a wood or a lake if possible, children with weak chests being sent to special colonies in the mountains. At Stockholm they were inaugurated in 1884, and during the years 1885-98 the town sent out 322 colonies with a total of 7,302 children, making an average of 23 children in each colony. The average stay of each child was sixty days (8½ weeks), and the average daily cost per head 55 öre (about 7d.). Some of the great industrial companies maintain similar colonies for the children of their workmen. Holiday Colonies.

The object of the Workshop Refuges for poor children (Arbetsstugor för Barn), founded by private enterprise in 1886, is to keep destitute children, or children whose parents are away at work all day, from the temptations of the street, and, perhaps from begging, out of school-hours, and at the same time to inculcate a love of work early in life, and give them a certain manual dexterity, by teaching them handicrafts which will later on enable them to support themselves. They receive one or two meals as wages for their work. The age of the children varies from seven to fourteen, and they are admitted on the recommendation of the primary school teachers. The smaller children (seven to ten) work from eleven o'clock to one, and have their dinner at the refuge; the elder ones come from five o'clock to six three times a week, and get their supper; but a certain number of children stay from one to half-past seven; they dine, do their school preparation, work, and have supper. Some children take work home with them, for which they are paid, keeping an account of their earnings in a savings book. Workshop Refuges.

Instruction is given at the refuges by workmen and mistresses employed for the purpose in chip-carving, rafia-work, fret-work, iron-work, wood-carving, dressmaking, weaving, carpentering, brush-making, basket-making, and shoe-making.

As a rule, the parish authorities provide the necessary room, and the refuges are managed by voluntary lady workers, so that, in spite of the expenditure on fuel, light, food, and materials, and the salaries of the instructors and mistresses, the cost of maintenance is very small, and does not exceed 14 kr. a year for

each child. The "Lars Hierta" Institution* makes a grant of 500—1,000 kr. towards the installation expenses of each workshop, the municipality of Stockholm makes an annual grant of 15,000 kr., and the remainder of the expenses are met by annual subsidies from the commune, private donations and the proceeds of the sale of the children's work.

Fourteen years' experience has given ample proof of the social value of these institutions, of which there are now twelve in Stockholm, frequented by 1,500 children (60—200 in each refuge), and twenty-five in various provincial towns. The acquirement of manual dexterity, very easy to a young child, forms his character, and has a stimulating effect on his general intelligence and powers of observation by which his school work profits; while the power and love of work have saved many children from ruin, who in their own homes were subject only to demoralising influences.

II.—FURTHER EDUCATION ON THE BASIS OF THE PRIMARY SCHOOL.

People's
Colleges or
People's
High
Schools.

The higher grade elementary schools and the primary schools continuation classes have been already mentioned in connection with primary instruction, and we now wish to describe a class of institution which is peculiar to the three Scandinavian countries and Finland, namely the People's Colleges or High Schools (*Folkhögskolor*), of which the aim is to educate young men and women of the lower classes, not only as working men and women, but as citizens, and to instruct them as to the exercise of their political and civic rights and duties.

The movement which produced these institutions is of Danish origin, and took its rise in the fear of German aggression in the middle of last century, which made Denmark seek every means of raising her national intellectual standard. In Sweden these schools made their appearance after the Local Government Act of 1862 and the Reform Act of 1866 had, by increasing the political importance of the lower classes, proportionately increased their need for higher education.

The first People's College was founded at Hvilan in 1868; it is still in existence, and has practically served as a model for

* This institution, founded in 1877, at Stockholm, by Mrs. Wilhelmina Hierta, in memory of her husband, Lars Hierta, the politician, and member of the Riksdag, and the founder of the liberal press in Sweden, aims at encouraging all socially beneficial work in science, industry, politics, and education. At the present time the capital at the disposal of the committee amounts to 550,000 kr., the income from which is employed either to subsidise existing or to initiate new efforts in the cause of humanity. Competent enquirers have been dispatched by the institution to America to report on the organisation of mixed schools; to England to inspect the work of the Charity Organisation Society, Miss Octavia Hill's workmen's dwellings and the schools of cookery; to France and Germany to study bacteriology, etc.

the later colleges, of which there are now twenty-eight. The majority owe their establishment to private enterprise, but since 1872 the Government has made fixed grants, the total of which in 1898 amounted to nearly 75,000 kr. (besides scholarships for poor students to the amount of 15,000 kr.). The county councils and the agricultural societies also make annual grants to the colleges, and the pupils pay fees of varying amounts from 15 to 80 kr. a year.

Government
and Local
Grants.

Students'
Fees.

As a rule, these colleges are situated in the country, and have their own buildings, with lodgings for the teachers and some of the students, the remainder of the students boarding out in the neighbourhood. Many colleges have a gymnasium, which is also used for holding local meetings.

The efficiency of the college depends to a great extent on the personal capacity of the director, who has a very free hand in the management, as well as in the choice of the curriculum, there being no fixed syllabus and no leaving examination. The director is generally a university man, and the other professors (one to four for each college) are either candidates for the degree of doctor of philosophy, engineers, agriculturists, or officers. The colleges are managed by committees chosen by the contributing authorities and societies.

College Sta

Students are admitted on the completion of their eighteenth year, if they have passed creditably through the primary school course, and can produce satisfactory certificates of character. The average age of the students is from twenty to twenty-two years. In the period 1896-98 the total number of male-students was 15,499, about 27 a year in each college. In 1898 there were 819, about 29 for each college.

There are two courses of a year each, but the first and second year's instruction differ so fundamentally that the majority of students do not enter the second year. The teaching is given in the form of lectures alternating with catechising lessons, object lessons, and written exercises. Text-books are read and explained, and very exact instruction given as to the meetings and duties of the various local government bodies.

Curriculum

According to an average drawn from the time-tables of some of the oldest and most important schools, the school time for the first year's course in 1897-98 was apportioned as follows:—Swedish language, 186 hours; history, 80; geography, 57; central and local administration, 56; rural economy, 22; natural science and hygiene, 120; arithmetic, 85; geometry and surveying, 45; book-keeping, 47; linear and plain drawing, 68; writing and singing, 46 each; gymnastics, 69; besides reading literary classics, holding debates and meetings, and, in some schools, instruction in manual work. The second year's course is more practical, and includes husbandry, stock-breeding, and forestry. In twelve schools this second year's course forms a real agricultural training and receives a special Government grant.

courses for
men.

Similar courses have been organised at the colleges for female students. As the men's courses are held in the winter, the idea at once suggested itself of holding classes for women during the summer, though at some of the more recently established colleges in Norrland the women's courses are held in the winter side by side and partly in common with the men's courses. The first courses for women were started at the college at Hvilan in 1873, and they have increased rapidly since then. The total number of women students from 1873-98 was 5,600, an annual average of 25 for each college: in 1898 there were 591 women students in twenty-two colleges (27 for each college). As a rule, the women's courses are managed by the director, with the assistance of his wife and a sufficient number of masters or of specially appointed mistresses. The subjects taught are Swedish, history, geography, natural science, hygiene, domestic economy, arithmetic, book-keeping, writing, singing, and various kinds of manual work, such as weaving.

Students' societies.

Very often the students on leaving college form old students' societies (*folkhögskoleförbund*), which meet several times a year at the college to attend special lectures and hold debates on subjects of general interest: in this way, as well as by organising public lectures and popular patriotic festivities, and short summer courses for old students and the primary school teachers of the district, the college often forms an intellectual centre for its district.

Workmen's institutes, Lecture associations.

The workmen's institutes in the towns provide lectures for their members as well as the opportunity of instructive reading. In many places, both in the towns and amongst the peasants in the great agricultural centres, lecture associations have been formed to defray the expenses of lectures delivered by the teachers in the high schools, by university professors, and by other competent persons. These associations and institutes receive grants from Government to the amount of 55,000 kr. yearly.

III.—SECONDARY EDUCATION.

Introductory

In Sweden, as elsewhere, the oldest institutions for secondary instruction were the medieval cathedral and convent schools and the grammar schools founded by the burghers of the towns. But the Reformation disorganised the whole educational machinery of the country, and a state of more or less chaotic inefficiency resisted all serious efforts at reform till the reign of Gustavus Adolphus (1611-1632), to whose educational enthusiasm Sweden owed so much. On his initiative the first gymnasia with adequate pecuniary resources and a competent teaching staff were established, the oldest being started at Vesterås by Bishop John Rudbeckius in 1620. The celebrated Comenius was invited to Sweden, and drew up the first special code for these schools in 1649, which, though considered a masterpiece of pedagogics for its time, was never completely enforced. However, the course of secondary instruction was divided between two separate

schools—a preparatory school (*trivialskolan*) and the gymnasium proper, each with a four years' course. These schools prepared their pupils almost exclusively for the Church and the public service.

At the beginning of the nineteenth century natural science and modern languages made their first modest appearance in the curriculum, and the idea of a more radical educational reform to meet the exigencies of practical life kept gaining ground. In 1825 the whole question was referred to the "Grand Committee on Education," which numbered amongst its members some of the most eminent men in Sweden at that day. For instance, Tegnér, the poet of the "*Frithiofsaga*," who revived for his compatriots the old Scandinavian poetry; Geijer, a poet also, and greatest of Swedish historians, both peculiarly representative of the culture and liberal opinions of their day and country; Bishop J. O. Wallin, a powerful religious poet, and the compiler of the Swedish official psalter; Agardh, a statistician and writer on educational subjects, who also distinguished himself by his study of algæ; and Berzelius, the world-famous chemist, who revolutionised the chemical theory of his time, and was one of the founders of modern chemistry. The labours of the committee lasted three years (1825-28), and its very remarkable report, though not productive of immediate practical results, at least placed the question of educational reform beyond the fear of being shelved, so that the seventy years since its appearance have been occupied with almost uninterrupted and careful experimenting, although as yet with no conclusively satisfactory results.

In 1849 the preparatory school and the gymnasium were incorporated into one establishment—a measure which is now generally regarded as ill-advised, and will probably not long await reversal. Amongst the partial reforms which followed we must mention—the abolition of Latin as a compulsory subject, which led gradually to the idea of a modern course of instruction without classical languages (*reallinie*); the transference of the "*mogenhetspröfning*" or maturity examination, from the universities to the gymnasia in 1862; the creation of a one year's training course for gymnasium masters in 1865; the abolition of the lowest class; and the establishment in 1869 of a semi-classical course with Latin, but without Greek.

During this period many committees have elaborated projects for a radical reform of secondary education. The most recent of these committees began its deliberations in 1899, and its conclusions will shortly be submitted to public opinion. The essential points in favour of which there seems to be a general consensus of opinion are the re-separation of the preparatory school and gymnasium, the introduction of a "leaving examination" for pupils of the age of fifteen or sixteen, the postponement of Latin to a later period of the course, greater

liberty in the choice of subjects for more advanced study, and a larger place for the elements of national culture.*

Secondary Schools for Boys.

According to the regulations (dating from 1878) actually in force, the Government secondary schools have the double aim (1) of completing the education of a Swedish citizen by studies on a higher plane to that which is possible in a primary school, and (2) of laying the foundation of scientific knowledge, which may be carried afterwards to a further point at the University or higher technical school.

Control and
Inspection of
Secondary
Schools.

The Government secondary schools or *gymnasia* (*gymnasiet*) are under the control of a special branch of the Education Department, the head of which (*kansliråd*) reports to the Education Minister on all matters concerning secondary instruction, and makes occasional tours of inspection to the schools.

In each diocese the bishop is the inspector-general of secondary schools (*eforus*), appointing a deputy inspector for each school outside the cathedral city, and the diocesan chapter shares in the administration of the schools and appoints the professors. In Stockholm the secondary schools are under a special board which performs the duties elsewhere discharged by the "*eforus*" and the diocesan chapter, only the *Nya Elementarskolan*, being a State experimental school, is independent of local control.

Management
of the Gym-
nasium.

At the head of each *gymnasium* is a rector, who is appointed by the Government for a term of five years, which may be renewed. He not only teaches in the school, but is responsible for its financial management and its whole internal administration, in which he is assisted by the teachers' council (*läroverkskollegiet*) over which he presides, and which decides all questions relating to the instruction, discipline, and financial situation of the school. If the rector disagrees with the decision of the council, the matter is referred to the "*eforus*."

Organisa-
tion.

In the school year 1897-98 there were in all 79 *gymnasia*, 36 complete *gymnasia*, giving a nine years' course (*högre läroverk*); 22 with a five and 17 with a three years' course (*lägre läroverk*); 3 with a two years' course; and 1 with a year's course. This is according to the provision included in the State Budget, but in point of fact, thanks to grants from their respective communal councils, the smaller *gymnasia* were enabled to extend

* It is understood that opinion is formulating itself in favour of some arrangement on the following lines: To leave about fifteen secondary schools with the curriculum as at present; in other cases, to remove Latin from the curriculum of all classes up to that reached by boys of about sixteen years of age; at that point to have an examination on all the subjects previously taught; at the age of sixteen, boys, remaining in the school, to have a choice between two parallel divisions, the one classical, the other non-classical in curriculum, but both preparatory to learned study; considerable freedom of specialisation to be allowed in this higher portion of the schools.

their instruction, so that in the year in question (1897-98) thirty-four were actually giving courses of five, and one a course of four years. Twenty out of the thirty-six full gymnasia had complete classical and modern sides, twelve had only a classical, and four only a modern side. According to the regulations, the number of pupils in each of the five lower classes must not exceed thirty-five, but, as double classes may be formed, many of the larger gymnasia have as many as six or seven hundred pupils, and the smaller from three to four hundred. As can be seen from the table on the next page, there has been no appreciable increase in the numbers during the latter decennial periods, but the table clearly demonstrates the transference of pupils from the classical to the modern side.

No pupil is admitted to a gymnasium till he has completed his ninth year. Candidates for admission are specially examined (except such as are merely passing from one gymnasium to another), and in order to enter the lowest class (I.) must have attained a standard fixed by law, but which has lately (1894) been modified to facilitate the entrance of scholars from the primary schools.

The school year begins at the end of August, and lasts nominally 36 weeks, being subdivided into an autumn term of 16 and a spring term of 20 weeks, which includes a week's holiday at Easter and half a week at Whitsuntide. This reduces the actual school year to $34\frac{1}{2}$ weeks—a considerably shorter one than in other European countries, Denmark having a school year of 43, Prussia of 42, France of 41, and Norway of $38\frac{1}{2}$ weeks.

The complete gymnasium course lasts nine years, and is divided into seven classes, the two upper classes taking two years each, the others a year. At the end of each spring term there is a general promotion. The pupils who, after spending the school year in a class, are considered fit for promotion are moved up to the next class without any further special examination. Those who are not considered fit to be promoted are left behind in the same class, but may, if they so wish, be examined after the holidays with a view to its being ascertained whether they are capable of doing the work of the higher class. If the result of the examination is satisfactory, they are promoted.

The division into a classical and a modern side only takes effect at the beginning of the fourth year, and the difference, very slight at first, becomes more accentuated in each succeeding year. At the beginning of the sixth year the classical side is divided into two divisions—A with Greek, B without Greek.

The table on page 117 gives the curriculum (revised in 1895) *Curriculum.* adopted by all gymnasia, with the single exception of the *Nya Elementarskolan* at Stockholm, which has modified it considerably.

Number of Pupils in Gymnasia.

Average Years.	Total Number.		Classes I.-III. ¹	IV. and V.		VI. (1)—VII. (2). ²		IV.-VII. (2).	
	Absolute.	Per 1,000 of Population.		Classical Side.	Modern Side.	Classical Side, Section A. ³	Classical Side, Section B. ³	Classical Side.	Modern Side.
In 1875	12,717	29.1	6,844	1,928	1,356	1,303	893	4,124	1,749
1876-80	14,376	31.9	7,393	2,159	1,593	1,307	1,183	4,649	2,334
1881-85	14,986	32.5	7,094	2,364	1,626	1,263	1,848	5,475	2,417
1886-90	14,507	30.6	7,116	1,897	1,874	910	1,843	4,650	2,741
1891-95	14,914	30.9	7,340	1,700	2,467	701	1,523	3,924	3,650
In 1898	16,520	32.8	7,798	1,671	2,908	828	1,552	4,051	4,671

1. The classical and modern sides work together in the three lowest classes.

2. The 6th and 7th classes have each an upper and lower division.

3. Section A, Latin and Greek. Section B, Latin but no Greek.

Curriculum.—Number of hours per subject per week.

Subjects.	Section	I.	II.	III.	IV.	V.	VI. (1.)	VI. (2.)	VII. (1.)	VII. (2.)	Total No. of Hours.
Religious Instruction	All	3	3	3	2	2	2	2	2	2	21
Mother Tongue	All	5	5	6	4	3	2	2	2	2	31
History and Geography ⁽¹⁾	All	4	5	6	4	4	3	3	3	3	35
Philosophy ⁽²⁾	All	—	—	—	—	—	—	—	1	1	2
Class Composition	All	—	—	—	—	—	3	3	—	—	6
Latin	C ⁽³⁾	—	—	—	7	7	6	6	7	7	40
Greek	Ca ⁽²⁾	—	—	—	—	—	6	6	6	6	24
German	Ca ⁽²⁾	6	7	6	4	3	2	2	2	2	24
English	Ca ⁽²⁾ M ⁽¹⁾	6	7	6	4	3	1	1	1	1	30
French	Cb	—	—	—	6	6	3	3	2	2	10
Mathematics	Ca M	—	—	—	—	—	3	3	3	3	17
Science ⁽⁴⁾	Ca	4	5	5	5	4	3	3	4	4	19
Natural History ⁽¹⁾	Cb	4	5	5	5	4	4	4	4	5	35
Physics	M	4	5	5	5	4	4	4	4	5	41
Chemistry	All	2	2	2	3	3	6	6	7	7	49
Writing	Cb M	—	—	—	—	—	—	—	—	—	13
Drawing	C	—	—	—	—	—	1	1	1	1	4
	M	—	—	—	—	—	1	1	2	2	6
	All	—	—	—	—	—	2	2	3	3	10
	M	—	—	—	—	—	2	2	2	2	8
	All	2	2	1	—	—	—	—	—	—	5
	Ca	1	1	1	1	1	—	—	—	—	5
	Cb	1	1	1	1	1	2	2	1	1	11
	M	1	1	1	2	2	3	3	2	2	17
Total	All	27	30	30	30	30	32	32	31	31	273

(1) C = Classical side. (2) Ca = Section A. (3) Cb = Section B. (4) M = Modern side. (5) Geography is taught in special hours in I.—V.; 2, 2, 3, 1 hours respectively. (6) Psychology and Logic. (7) Zoology I.—V.; Botany II.—V.; Physics and Astronomy IV.; Chemistry and Geology V. (8) Botany, Zoology, and Hygiene.

There are five or six hours' lessons daily, but the regular timetable does not include the compulsory instruction in singing (two hours a week), gymnastics (at least three hours a week, half an hour a day), and military drill, nor the optional drawing and music lessons and English (for the two upper classes of Section A). The military drill (for the four senior classes) only occupies sixty hours, and is taken exclusively in the first five weeks of the autumn session, the ordinary class-work being modified to make room for it at the discretion of the rector and council.

Of late years compulsory holiday tasks are set for the long summer vacation of twelve weeks; the subjects being settled for each class by the rector and the teachers of the various boards, and in the main points in agreement with the scheme drawn up in 1895.

leaving
examination

The leaving examination, called the "maturity" examination (*mogenhetspröfning*), which is also the test for matriculation at the universities, is held at the larger gymnasia in the course of the spring term. (A supplementary examination for candidates who failed at the spring examination, or were unable to present themselves for it, is held at the end of the autumn term.) The examination is conducted by special commissioners (*censurer*) selected by the Government, the majority being generally university professors; it is divided into two parts—an oral and a written test, the latter, which lasts from four to six days, being held some weeks before the former, only candidates who have passed the first part being admitted to the second. The questions are determined by the head of the Department of Public Instruction, after a consideration of the proposals made by the whole body of commissioners. The oral examination is carried out by the teaching staff in the presence of the commissioners, who may, if they choose, put questions to the candidates on their own account. A mark of "satisfecit" in all subjects is required for a pass. The principle of compensation, however, is admitted within certain limits.

As a rule only about one-fourth of the pupils of the gymnasia pass this maturity examination. During the years 1893-97, 1,883 pupils left without passing it, of whom 531 went into commercial schools or directly to commercial employment; 225 to manufactures or trade; 214 to private schools or study; 137 to technical schools; 109 to agricultural work or agricultural schools; and 85 to the merchant navy. The following table, which gives the results of the maturity examinations from 1871 to 1897, shows no perceptible increase in the number of passes during those years, but there is a steady decrease in the number of matriculations at the universities, which is accounted for by the increasing attractions of practical careers.

Successful Candidates at the Maturity Examination.

Years.	Number of Passes.			Per 100,000 of the Population.	Passes.		Gymnasium Pupils.			University Matriculations.	
	Boys.	Girls.	Total.		Gymnasium Pupils.	Private Pupils.	Classical, Section A.	Classical, Section B.	Modern Side.	Number.	Expressed as percentage of Maturity Exam. Passes.
1871-75	612	2	614	14.36	557	57	—	—	65	430	79.0
1876-80	570	4	574	12.75	470	104	206	137	67	376	65.5
1881-85	773	11	784	17.02	665	119	208	263	134	509	64.9
1885-90	760	27	787	16.60	658	129	200	327	122	462	58.7
1891-95	665	27	692	14.33	575	117	145	285	145	350	50.6
1896-97	726	46	772	15.55	629	143	146	271	212	351	45.5

Secondary School Teachers.

Teachers'
Qualifications
and Training.

There are three categories of professors in the gymnasia besides the rectors—the professors (lektorer), who teach chiefly in the upper classes, and must be doctors of arts or science; the assistant professors (adjunkter), who teach the lower classes of the large gymnasia and in the smaller schools, and who need only have the degree of candidate in arts or science; and, thirdly, instructors who teach drawing, music and singing, gymnastics and military drill.

Besides their respective degrees, both categories of professors must have gone through a course of training for one year in one of the five training gymnasia (three at Stockholm, one at Upsala, and one at Lund), and they have to undergo a practical trial in the presence of the electing authorities.

In 1897-98 there were 1,225 teachers actively engaged in instruction in the gymnasia, namely, 79 rectors, 207 professors, 529 assistant professors, 164 supplementary professors, and 246 instructors.

In the larger gymnasia the rectors are required to teach from 12-16 hours a week, in the smaller from 20-24; the professors from 18-22; and the assistant professors, from 24-30 hours a week.

In the lowest class the whole of the teaching is in the hands of one class master; in the three succeeding classes it is, as far as possible, entrusted to one or two masters, at most to four; after the fourth class, the system of special teachers for each branch is in force.

Salaries.

In 1883 the Riksdag voted an increase of 500 kr. on all salaries, so that at the present time the salary of a rector of a large gymnasium is 5,000 kr., increasing to 5,500 kr. after ten years service, that of a rector of a small gymnasium rises from 3,500 and 4,000 (according to the size of the school) to 4,000 and 4,500 respectively. The professors' salaries begin at 3,000 kr. and rise to 5,000 by five-yearly increments; the assistant professors' salaries begin at 2,000 and rise to 4,000. Rectors receive free lodging or an equivalent allowance, and in some towns where living is dear the municipal councils make the professors of the gymnasia an allowance for rent. At seventy years of age and after forty years' service professors can claim a pension of about 80 per cent. of their salaries; and there is a considerable widows' and orphans' pension fund, to which the professors themselves contribute. At present the need for an increase in the number of gymnasium professors is great, and the matter is actually under consideration. In 1897-98 there were 27 women teachers ranking as gymnasium professors.

Pensions.

Secondary School Budget.

Each diocese has to maintain building and prize funds for the secondary schools under its jurisdiction; they are supported by

Government and municipal grants and private contributions, and are administered by the chapter. The towns in which gymnasia are established have to provide gratuitously a site sufficient for the school building and playground, and in some cases the town, instead of the diocesan building fund, builds and maintains the school house. When these local resources are inadequate to the needs of the district, the Riksdag occasionally votes a grant in aid. Both æsthetically and practically Swedish secondary school buildings attain a high standard, and their total value was estimated in 1897 at over ten million crowns. The Norrmalin Gymnasium at Stockholm cost for building and furnishing 842,000 kr., the modern gymnasium at Stockholm cost 783,000 kr., and that at Gothenburg 542,000 kr. The pupils pay an admission fee of 10, and school fees to the annual amount of about 30 crowns, from which payments, however, those in poor circumstances may be wholly or partially exempted, their fees being charged to the diocesan scholarship fund, or to scholarship funds belonging to the school itself, derived from private legacies, sometimes of very considerable amounts. (During the year 1897-98 these school funds increased to the extent of 1,003,517 kr.) The school fees generally cover the expenses of heating and lighting the building, and provide teaching apparatus and prizes. In 1897 the Government contribution to the expenses of the secondary schools amounted to 3,433,947 kr., about 215 kr. per scholar.

State Secondary Schools for Girls.

Secondary schools for girls are a modern innovation in Sweden, and, with the exception of the Wallin School at Stockholm and the Kjellberg School at Gothenburg, founded between 1830 and 1840, have been established during the latter half of the nineteenth century. Before that girls were educated at home by governesses or in private schools, for the most part boarding schools, where, owing to the lack of adequate training for women teachers, the instruction was often very defective. The gradual recognition of this led to the establishment at Stockholm in 1861 of two institutions for girls' higher education; a training college for women teachers (*högre lärarinneseminariet*), and a gymnasium for girls (*statens normalskola för flickor*) affiliated to it as a practising school. These are the only State institutions providing secondary education for girls.

Both institutions are under the control of a council nominated by the Crown, and the management is in the hands of a rector, with a directress for each school under him. The staff are appointed by the council, the teachers taking rank with the professors in the boys' gymnasia. Women teachers receive salaries equivalent to those of assistant gymnasium professors.

Pupils are admitted to the training college after attaining their eighteenth year, and must hold the leaving certificate of the girls' gymnasium, or an equivalent qualification. There are about twenty-five pupils in each of the four courses.

Training
College
Course.

Of these four courses, each comprising one year's study, the three lower are obligatory for all students of the college, the fourth year's course being a special one for students who wish to become professors in secondary schools. Fourth-year students may select their own curriculum, but in the three lower courses the school time is apportioned as follows: about 32 per cent. of the total school hours are given to French, English, and German; 24 per cent. to religious instruction, Swedish, history, and geography; 23 per cent. to mathematics and natural science; 8 per cent. to science and method of teaching; and 13 per cent. to singing, drawing, and gymnastics. Not all these subjects, however, are compulsory.

Gymnasium Course.

The affiliated gymnasium has a three years' preparatory course for children from six to eight years of age, as well as the secondary school proper, which has eight classes, and a supplementary course of domestic economy. During the eight years' course, 24 per cent. of the total school time is devoted to French, German, and English; 33 per cent. to religious instruction, Swedish, history, and geography; 15 per cent. to mathematics and natural science; and not less than 28 per cent. to writing, drawing, singing, manual instruction, and gymnastics. Many of these subjects are optional.

School Fees.

The yearly school fees vary from 75 kr. in the lowest to 185 kr. in the highest class, but there are fifteen free and five half-free places.

Household School.

In 1893 a domestic economy school was added to these institutions in which instruction is given not only to the pupils of the supplementary course, but also to girls who wish to become domestic economy teachers in secondary schools. For these latter, who must have attained their twentieth year and a certain standard of knowledge, there is a special theoretical and practical course, comprising physics, chemistry, food and feeding, domestic economy, hygiene, commercial theory and book-keeping, pedagogics and practical instruction in cooking, baking, confectionery, the purchase of food, and various kinds of cleaning. The instruction is free, but the pupils pay a fee of 85 kr. for meals taken at the school.

Private Institutions for Secondary Instruction.

A. Boys' Schools.

The low fees charged by the State gymnasia have proved a great obstacle to the establishment of private secondary schools, so that there are, as yet, only four private colleges whose leaving examination ranks with the gymnasium "*mogenhetspröfning*";—two at Stockholm, one being a mixed school for boys and girls, one at Upsala for future pastors, and one at Lund. They receive a small grant from Government, the total of which in 1899 amounted to only 35,000 kr.

There are, on the other hand, a considerable number of private preparatory schools for the gymnasia.

B. Girls' Schools.

There are some 120 private secondary girls' schools with a sum total of 13,000 pupils. Founded by individuals, communal authorities, or private companies, they have enjoyed considerable liberty of development, but have suffered from a lack of efficient inspection and management, and often from inadequate financial resources. The Government made a first attempt to remedy these deficiencies in 1875 by a substantial grant in aid of 30,000 kr., participation in which was conditional on the school being open to inspection by the Government and diocesan inspectors; on the provision of an at least equal sum by the municipal authorities or from private sources; and on the foundation of a certain number of free scholarships. This grant has been made an annual one, and has been on several occasions increased, until it now reaches the amount of 200,000 kr.

In 1885 the Government, on the initiative of the Riksdag, appointed a special commission, the first in Sweden to number women amongst its members, to make a searching inquiry into the financial position of these schools, but, although the Government grant was increased on its recommendation, that position is still far from satisfactory. At the present time, 88 schools, with a total of 11,218 pupils (2,386 in the preparatory divisions and 8,832 in the secondary schools proper), are in receipt of Government aid to a maximum amount of 3,000 kr. for each school, exclusive of special grants of 500 kr. for domestic economy. The fees paid by the pupils vary considerably from 30-100 kr. a year in the lower, and from 90-300 kr. in the upper divisions.

A large number of these schools have specially constructed buildings of their own: the new girls' gymnasium at Gothenburg, for instance, has a very splendid building, with a fine wall and staircase decorated with paintings by Mr. Carl Larsson.

Besides a preparatory division, generally open to boys as well as girls, most of these institutions have a seven or eight years' course, only a small number confining themselves to a course of five years. The curricula of the different schools, although based on that of the Government gymnasium, vary a good deal, especially in the relative number of hours devoted to different modern languages (French, German, and English), to mathematics, and to natural science. The work in the senior supplementary classes (twenty schools have established these) varies too, of course, according to their object, whether they prepare for the universities or the Government training college, or supply instruction in special subjects, such as domestic economy, or form an independent training course for teachers. Five schools (four at Stockholm and one at Malmö) have the right to hold a "mogenhetspröfning" for their pupils. Women were first admitted to this examination in 1870, a very small number availing themselves of the privilege during the first ten years,

Financial Position.

Organisation and Curriculum.

Leaving Examination.

but since that date the candidates have steadily increased to at least fifty in each of the last three years, so that the total number of passes amounted in 1898 to 506.

Teaching Staff.

Salaries.

Pensions.

The teaching staff in most of these private schools is a mixed one. The male teachers are mostly professors engaged at a boys' gymnasium, who teach special subjects, and are remunerated by the hour. The women's salaries are quite inadequate to the high level of competence required from them; even the directresses rarely receive more than 1,200 or 1,500 kr., and the teachers about 1,000 kr. Their financial position has improved of late owing to the establishment by a certain number of these schools of a joint pension fund, to which, however, the teachers themselves have to make some contribution.

IV.—UNIVERSITY EDUCATION.

Universities of Upsala and Lund.

Sweden has two universities established and supported by the State—one at Upsala, founded in 1477, the oldest in the Scandinavian countries; and one at Lund, founded in 1668 to promote the union of the provinces conquered from Denmark with the rest of Sweden.

Carolin Institute.

The State also supports a medical college, the Carolin Institute, at Stockholm (Karolinska medico-kirurgiska institutet), founded in 1815.

As both the universities, like the oldest English universities are situated in provincial towns, private enterprise in the capital has sought to compensate the lack of a university by the foundation of a university college (*högskola*), an example which has been followed by Gothenburg.

THE STATE UNIVERSITIES.

University Administration.

Like all other State educational institutions, the two universities and the Carolin Institute are under the control of the Education Department.

The supreme direction of the three institutions is in the hands of an honorary chancellor (*kansler*) appointed by the Crown on the proposition of the three colleges. This officer has to enforce the university statutes, supervise the annual budget and the management of the university property, to advise on all appointments, and in general to represent the Government in the management of the universities. He has a paid secretary (*kanslerssekreterare*) and two vice-chancellors, one for each university (posts which are held at Upsala by the Archbishop and at Lund by the Bishop), who act as his deputies, and in certain circumstances as intermediaries between the chancellor and the local academic authorities.

Management of the Universities.

The immediate management of the universities is in the hands of rectors elected for one year (they are eligible for re-election) by the university council from the professorial staff, a vice-rector being chosen for the same period and in the same way.

The rector presides over the two university councils who assist him in the administration. The grand council (*större akademiska konsistoriet*), consisting of the entire staff of ordinary professors, supervises all important matters of administration, presents candidates for vacant chairs, awards scholarships, etc. The lesser council (*mindre akademiska konsistoriet*) consists of the rector and vice-rector and five members elected for three years; it enforces the regulations as to lectures and examinations, and maintains the discipline of the university. There is also a budget committee, which has the charge of the financial administration, and which consists of the treasurer, vice-treasurer, and three members, elected by the great council for three years. The Carolin Institute has a council (*lärarekollegiet*) consisting of all the teaching staff, ordinary and extraordinary, and a rector elected by the council for three years. A dean (*dekanus*) elected annually from the council acts as vice-rector.

According to the statutes actually in force (sanctioned in 1876 and revised in 1891), the professorial staff of each university is divided amongst four faculties—theology, laws, medicine, and philosophy, which is subdivided into arts and science. Each faculty and section appoints one of its members every year to act as dean of the faculty. The faculties confer three degrees in their respective fields—those of candidate, licentiate, and doctor, but the degree of doctor of theology is conferred by the Crown without examination. Certain special examinations for public offices are conducted by the faculties of theology and laws. The professors are divided into two categories—ordinary and extraordinary professors, the latter receiving lower salaries and no pensions; there are also an indefinite number of lecturers (*docenter*) attached to each chair, besides laboratory demonstrators and an astronomical assistant (*observator*) for each of the two university observatories. Modern languages are taught by special readers (*lektorer*), natives of the respective countries, and there are, finally, special instructors (*exercitie-mästare*) for gymnastics, music, and drawing.

The professors may be appointed by competition or election. In the first case, the faculty in which the vacancy occurs, advised by at least three specially appointed experts, reports to the grand council on the relative merits of the candidates, and the grand council send up three names to the King, who makes the appointment after consultation with the chancellor. But when a faculty wishes to secure some particular savant of high standing for a chair, they may simply (by a two-thirds majority) present him to the council for election, which sends his name only up to the King. The lecturers in each faculty are nominated by the chancellor at the instance of the faculty.

In 1898 the total number of teachers in the two universities and the Carolin Institute amounted to 280—74 ordinary and 64 extraordinary professors, 20 demonstrators, observatory assistants, etc., and 122 lecturers. The salary of an ordinary

Faculties.

Degrees.

Professorial Staff.

Appointment.

Salaries	professor is 6,000 kr. a year, that of an extraordinary professor 4,500, with an increase of 500 kr. after five and ten years service. The demonstrators in the medical faculties receive 4,500 kr., those in the other faculties 3,000 kr. Lecturers have no salary as such, but a certain yearly sum is allocated by the university chest to form bounties for them, which are awarded for merit by the chancellor on the proposition of the faculties. The modern language readers receive salaries of 2,000 kr.
Pensions.	Ordinary professors receive a pension of 4,500 kr. on the completion of their sixty-fifth year, and their widows and orphans, like those of all public functionaries, receive pensions from a general fund to which all have to contribute.

The academical year begins on the 1st of September, and is divided into two sessions—an autumn session (September 1st—December 15th), and a spring session (January 15th—May 31st). Every professor is obliged to deliver public lectures of an hour each on four days in the week. The whole instruction, lectures, and practical demonstrations alike, is gratuitous.

The period of academical study drags out to a disproportionate length in Sweden, partly owing to the high standard exacted by the professors, and partly owing to the somewhat unpractical arrangements of the teaching. Thus the preparation for the licentiate's degree in philosophy (arts or science) generally takes six to eight years, a candidate's degree in laws requires five to six, in theology six to seven, and a licentiate's degree in medicine as much as nine years. An attempt at reform in this matter has been recently made by the establishment of preparatory courses for the preliminary examinations.

Students are admitted to matriculation without distinction of sex. The table on page 33 shows the numbers of students in the universities and private university colleges in the years 1870 to 1898. The decrease in the numbers of late years is only partially due to a decrease in matriculations, and partly to more concentrated work on the part of the students. Out of the total of 2,566 students in 1898, 293 belonged to the faculty of theology, 457 to that of laws, 584 to the medical faculty, and 1,232 to philosophy. Eighty of the number were women.

University Institutes.

Besides the very fine university buildings lately erected, each of the universities owns special institutes and collections installed in separate buildings with a special staff. At Upsala the most important are the university library (*Carolina Rediviva*), which contains 330,000 volumes, 12,500 manuscripts, and 5,000 boxes of pamphlets; the botanical garden, founded by Olof Rudbeck the elder, and augmented by Linnaeus; the observatory, the university hospital and asylum, besides institutes of anatomy, physiology, pathology, physics, chemistry, meteorology, and zoology.

Lund owns a library of 180,000 volumes and some 5,000 manuscripts, a numismatic museum with a valuable antique col-

Number of Students.

Years.	Average Population.	Upsala.	Lund.	Carolin Institute.	University College at Stockholm.	University College at Gothenburg.	Total.	Per 10,000 of Population.
In 1870 -	4,164,000	1,403	454	54	—	—	1,911	4.59
1871-75 -	4,274,000	1,554	542	82	—	—	2,178	5.10
1876-80 -	4,500,000	1,448	612	133	—	—	2,213	4.92
1881-85 -	4,665,000	1,600	807	233	40	—	2,780	5.99
1886-90 -	4,742,000	1,825	889	375	46	—	3,135	6.61
1891-95 -	4,832,000	1,564	728	380	50	32	2,754	5.70
In 1898 -	5,036,000	1,506	628	320	54	58	2,566	5.10

lection, a zoological museum founded by Sven Nilsson, a geological museum founded by Otto Torell, an observatory, and many important scientific and medical institutes.

The "Serafimerlasarettet" and other Stockholm hospitals are affiliated to the Carolin Institute, in connection with which and under the same management, a dental institute was established in 1898.

In order to promote scientific research each university publishes an annual review which contains the university reports and scientific memoirs by its members.

The University Budgets.

The total expenditure for 1898 amounted at Upsala to 881,573 kr., at Lund to 478,300, and at the Carolin Institute to 247,331 kr., together 1,607,195 kr. Of these sums, 427,000 kr. at Upsala, 144,000 kr. at Lund, and 21,600 at the Carolin Institute were met out of the private resources of the institutions respectively. The universities, indeed, are possessed of very considerable endowments, Upsala being particularly rich, and drawing the chief part of its revenues from 360 farms, a munificent gift to the university from Gustavus Adolphus. Large scholarship funds exist for the benefit and partly under the management of the universities, at Upsala they represent a capital of 3,000,000 kr., at Lund about 1,266,000 kr., and at the Carolin Institute about 300,000 kr.

University Extension Courses.

Summer Meetings.

Following the example of the English universities, university extension courses have been held in the summer since 1893 alternately at Upsala and Lund. The average attendance at Upsala amounts to 400 students, two-thirds of whom were primary school-masters and mistresses. The state and the communal councils make grants towards the expenses.

Private University Colleges.

Stockholm University College.

This institution is administered by a special council, and is quite independent of the state, but the municipality of Stockholm elects two members of the Council. The management is in the hands of a rector and a council of professors. As yet only two of the four projected faculties are in existence, namely, those of mathematics and natural science, besides which there are professorships of political and literary history and political economy. The remuneration and duties of the professors are on a scale similar to those of the university professors. In 1898 there were 57 students at the college, and 170 persons attended the public lectures, which are given by each professor twice a week. The international review "Acta Mathematica" is published at the college under the direction of certain professors and aided by a government grant, and the

college also publishes memoirs of the scientific work of its members.

Unlike the Stockholm College, this institution placed itself from the beginning under state control, its statutes received the royal sanction, and it has the right to hold certain examinations. Under the general inspection of the University chancellor, the college is governed by a special board, with a president nominated by the King. It has a rector and council of professors, and will eventually have complete faculties of arts, science, philosophy, and laws, but at present only a certain number of professorships have been founded in arts and philosophy. The salaries of the professors correspond to those of the university professors. In 1898 the college had 58 students, and over 1,000 persons attended the public lectures. The college publishes an annual review and a series of popular scientific monographs.

The University College at Gothenburg.

V.—TECHNICAL INSTRUCTION.

Technical instruction is of peculiar importance in a country like Sweden, whose physical conformation, with its vast forests, abundance of water power, and extensive mineral resources, is specially adapted to industrial exploitation. The Swedes, indeed, are particularly apt at industrial occupations and mechanical inventions, and, in consequence, the standard of technical instruction in Sweden is a high one. The two most important institutions are the Polytechnic School at Stockholm and the Chalmers Polytechnic at Gothenburg. Besides these there are five technical schools of a lower grade and a large number of small special schools in the various provincial towns.

Stockholm Polytechnic School (Tekniska Högskolan).

This institution was founded (under another name) by Royal decree in 1825, and the King nominates the president and three members of the council. It has five special schools: mechanical technology and machine construction (with a four years' course); chemical technology (three years); metallurgy and mineralogy, subdivided into science of mining and mining mechanics, metallurgy and factory administration (three to four years); architecture, with a four years' course, so arranged that students can continue their studies at the Academy of Fine Arts.

Curriculum

Each of these schools gives a complete course of theoretical and practical instruction in its particular branch, as well as in higher pure and applied mathematics.

The staff consists of twelve professors (chosen by the King on the initiative of the governing body), of seven lecturers, thirteen supernumerary instructors, and three "readers," with the requi-

Staff.

site staff of assistants. Since 1896 an institute for testing materials has been affiliated to the mechanical school, under a special director.

The gymnasium maturity examination (modern side) admits to the polytechnic; students who have not passed this must pass a special examination. The ordinary students pay no fees, but special students, taking a restricted number of lectures, selected by themselves, pay lecture fees. In 1890 the number of ordinary students was limited to 80, and though the limit was raised to 100 in 1892, the number of applicants always greatly exceeds the number of vacant places, and many are refused each year. In 1898-99 the total number of full and occasional pupils was 308.

The Government grant has been increased more than once, and now amounts to 146,700 kr.

The Chalmers Polytechnic at Gothenburg.

This polytechnic was founded in 1811 by the will of William Chalmers, who left a legacy of 105,689 kr. to found an "industrial" school, under the direction of the governing body of the local Freemasons' Orphan Asylum. Since 1829 the institution has become a technical school, and since 1855 has received a yearly government grant. The council is under the presidency of the governor of Gothenburg, and has six other members, the bishop, the director of the school, a manufacturer, and three members of the orphanage board.

Curriculum.

The school is divided into a junior preparatory division with a two years' course, and a senior division with a course of three years. The senior division has three special "schools" for mechanics, chemistry, and architecture, in which the instruction is similar to that of the corresponding sections of the Stockholm school. In 1886 a fourth school of naval construction was added to these. As at Stockholm, there are full and occasional students, and the conditions of admission are similar. In the junior division the branches taught are arithmetic and algebra, logarithms, plane trigonometry, plane and solid geometry, elementary chemistry and physics, and elementary mechanics; the elements of machine construction, and metal and woodwork; elementary, practical, and theoretical naval architecture; linear and freehand drawing, modelling, Swedish, book-keeping, and practical training in the workshops in carpentry and metal work.

Staff

The staff consists of seven lecturers, of whom one acts as director and has the title of professor, twelve instructors, and a certain number of assistants. In 1898 there were 251 ordinary and 24 special students.

An institute for testing materials was affiliated to the school in 1888.

Smaller Technical Schools.

The smaller technical schools not only prepare students for the two polytechnics, but also provide a complete course of elementary technical instruction for students destined to industrial employments. The oldest of these schools is at Malmö, having received its statutes in 1853, the three others started in 1856 at Norrköping, Örebro, and Borås. The statutes actually in force in all the schools date from 1877.

Pupils must be at least fourteen years old and have to pass an entrance examination, unless they have satisfactorily passed through the first five classes of the gymnasium. They pay an entrance fee of 10 kr., and a yearly school fee of similar amount.

The staff in each of these schools consists of four lecturers, a laboratory director, and at most five supernumerary instructors.

The course of instruction includes mathematics (arithmetic, algebra, plane and solid geometry, logarithms, trigonometry, and the elements of analytical geometry, linear and geometrical drawing, and surveying); mechanics (statics and dynamics, theory of machine construction and design, construction of complete machines and of parts and mechanical technology); physics (chief industrial applications of experimental physics), organic and inorganic chemistry (theoretical and practical), and chemical technology; mineralogy; geology; Swedish; either German, English, or French at the discretion of the management; book-keeping and commercial theory; architecture; freehand drawing and modelling; practical workshop training; gymnastics, and the use of firearms. The complete course takes three years.

The Eskilstuna technical school combines a night and Sunday technical school, with a special school for iron and steel industries, supported by a grant from the municipality. Eskilstuna School.

The instruction in the evening and Sunday classes follows the lines of the work in the smaller technical schools, but is not quite so comprehensive. The course in the special school comprises freehand drawing and the elements of design, modelling, wood engraving and engraving generally, metal founding and casting, and the working of metals by hand, etching, electroplating, forging, polishing, and turnery. In 1898 the pupils in the evening and Sunday classes numbered 154, and those of the special school 25.

The Stockholm technical school has five principal sections—Stockholm Technical School.
an evening and Sunday technical school, a technical school for girls, a superior industrial school, a school of architecture, and a school of machine construction. Instruction is also given in designing, artistic embroidery, painting and decorative painting, photo engraving, electrical courses for metal fitters, and gymnastics. The school started in private hands in 1844, and has

since been enlarged and reorganised, and placed under state control in 1860. In 1897-98 the total number of pupils in all sections amounted to 1,872.

Specialised
Municipal
Schools.

Various provincial municipalities support specialised technical schools, of which there are altogether thirty-one. The subjects taught in these schools vary according to the industrial employments of the towns in which they are situated. They receive a government grant, amounting in 1898 to 45,000 kr., and had in 1892 3,766 students, 851 of whom were women.

VI.—SCHOOLS FOR ABNORMAL CHILDREN.

Schools for Deaf-Mutes.

Organisation
of 1889.

While Heinicke in Germany and the Abbé de l'Epée in France were originating their methods for the education of deaf-mutes, about 1760, Abraham Argillander was doing a similar work in Sweden in complete ignorance of his two fellow-workers in foreign countries. The method he invented followed the same lines as Heinicke's, and the present oral system. Although a few isolated attempts were made to put his system into practice, the regular education of deaf-mutes in Sweden owes its inauguration to Peter Aaron Borg, whose institution at Stockholm, founded in 1808, carried out practically the whole education of deaf-mutes and blind children in Sweden until 1864. The institution ultimately passed under the control of the government; but between 1864 and 1889 private enterprise founded many new schools, and great efforts were made to attain the general adoption of the oral method, and to bring all deaf-mutes under instruction, until by the law of 1889 the government made an important step forward, which placed Sweden, in the matter of deaf-mute education, in the front rank amongst European nations. This act made attendance at a special school compulsory for all deaf-mute children from seven to fifteen years of age, devolved the maintenance of such schools partly on the county councils, and partly on the state, placed the schools under government inspection, and private instruction under the supervision of the managing body of the district school. For purposes of deaf-mute education Sweden is divided into seven districts, each with a special board and at least one school. A very free hand in the details of organisation is left to the district boards, a system which encourages improvement by maintaining a healthy competition. In certain practical matters, however, the need for greater uniformity of system has made itself felt, and projects for the proper organisation of the teaching staff, for a uniform scale of remuneration, and for the establishment of a general pension fund have been put forward by representatives of the district boards.

Each deaf-mute school consists of three sections, in which the children are placed according to the results of a preparatory

course of a year, during which they are tested as to their capacity for acquiring the oral system, the teaching of which is the main object of the schools. The three sections are devoted respectively to the oral system (lip reading) the manual system (finger alphabet and writing), and the combined sign and manual system (which allows the use of pantomimic signs to supplement the alphabets); within the oral section the children are classified strictly according to their standard of acquirement, this being a fundamental principle of the Swedish method.

Boys and girls are taught together, an arrangement characteristic of deaf-mute schools in Teutonic and Anglo-American countries.

The school year lasts forty weeks, and the curriculum is the same as that of the ordinary primary schools, besides which the boys do manual work and learn shoemaking and tailoring, while the girls learn needlework, weaving, domestic economy, and (in one school) cooking. Some of the schools also teach gardening to girls and boys. Curriculum.

The deaf-mute schools are on a large scale, with a hundred or more pupils apiece, housed in new and expensive buildings (representing a capital value of over 2,000,000 kr.), with very complete equipments of teaching material and apparatus. In four out of the seven districts the school is in one building, in one district each section has a house to itself, and two districts have the different sections in different towns. The schools are for boarders only in all but two districts, in one of which it is only a day school, and in the other takes boarders and day scholars.

The number of deaf-mutes in Sweden is a high one; according to the census returns in 1890, there were 5,307 (110.9 per 100,000 of the population), and it has increased since then, though inconsiderably. In 1899 there were 860 pupils altogether in public and private deaf-mute schools, of whom 669 were learning the oral system, 142 the manual and 19 the combined manual and sign system.

The teachers numbered 122; 54 men and 68 women. They are trained at the Manilla School at Stockholm, which is Borg's original institution, now transformed into a district school. The teachers formed an association in 1870, and since 1880 they have published a review which has become the official organ for deaf-mute education in the three Scandinavian countries. Teaching Staff.

The total expense of the public deaf-mute schools amounted in 1898 to 550,000 kr. The government grant amounts to 250 kr. per child, the remainder being borne by the county council. The councils have the power to charge fees not exceeding 100 kr. a year to the parents and guardians or to the poor law authorities, but many councils have not exercised it. Budget.

Old pupils are allowed, as far as practicable, to revisit the school for a short time every year, and one school made the

experiment of a continuation course for their old pupils, which was much appreciated and quite successful.

Only two of the old private schools have survived, one of which takes deaf-mute idiots who are capable of receiving some instruction.

For adult deaf-mutes there are still two institutions with about sixty pupils in each. The need for them naturally diminishes year by year, as the law for the compulsory education of deaf-mute children is more effectually enforced.

School for Blind Deaf-Mutes.

There is at Venersborg a little school for blind deaf-mutes—the only one in the world—which was founded in 1866 by Mrs. E. Anrep-Nordin, who still manages it. Since its opening the school has had twenty-eight pupils; at the present time there are fourteen, of whom six only are blind deaf-mutes, the remainder being blind, with some other complicating infirmity, amongst them some blind idiots.

The system of instruction employed is the writing method, using the deaf-and-dumb finger alphabet and relief-writing. Two of the children have given proof of remarkable intelligence, and have profited admirably by the training. The institution receives a government grant of 5,000 kr.

Schools for the Blind.

The education of the blind in Sweden, like that of deaf-mutes, owed its inception to Peter Aaron Borg. In his institution blind scholars were taught as well as deaf-mutes, but both suffered from the combination, especially the blind, who were greatly outnumbered by the deaf-mutes. Accordingly, in 1879, a special institution for blind scholars was established at Stockholm and transferred in 1892 to new buildings at Tomtebodavägen. But it was inadequate to the accommodation of all the blind children of school age—from the seventh to the seventeenth year) 200 in all, so the difficulty was met by the erection of two preparatory schools, one at Vexjö in 1884, and a second, affiliated to the Blind Institution in 1899, each with accommodation for forty pupils, while the institute has room for rather more than a hundred.

The education of blind children was made compulsory in 1899. The preparatory schools take the children at seven years of age and keep them four years, preparing them for the institute, where their education is completed. Children of feeble mental capacity remain two years longer in the preparatory school and complete their education there.

Preparatory School Curriculum

The teaching in the preparatory schools includes religious knowledge, mother tongue, writing, arithmetic, singing, gymnastics, practical work, as well as modelling and manual work.

The institute takes the children from the preparatory schools

and also children under fourteen who have become blind after their ninth year. The curriculum of the institute is the same as that of the schools with the addition of geometry, geography, history, natural science, certain industrial handicrafts, such as brush and basket making, cord spinning, and carpentering, music and piano tuning. The school year in schools and institute lasts forty weeks. Institute Curriculum.

The county councils pay a grant of 300 kr. a year for each child, part of which they can recover by a charge to parents and guardians or poor law authorities. Altogether the state spends 83,000 kr. a year on the education of the blind. Budget.

A training course for teachers of the blind has been opened at the institute, the pupils receiving scholarships from the government. Teachers.

The state also subsidises the printing of works for the blind to the extent of 2,500 kr. a year. The Braille type is almost exclusively used. The liberality of the state has had no deterrent effect on private benevolence, which finds its chief field of activity in caring for the blind when they leave school, or for those blind adults who have had no opportunity of instruction. Literature for the Blind.

There is a training school at Kristinehamn for those who lose their sight late in life, where they are taught gratuitously reading and writing, and such handicrafts as brush and basket making. The pupils have to pay for their board.

The census of 1890 returned the total number of blind persons at 3,948, of whom 1,992 were over sixty years of age (82.5 per 100,000 of the population). The number has decreased since then, thanks to the progress of medical science.

Schools for the Feeble-Minded.

In Sweden the last class of abnormal children to obtain education were the feeble-minded. The first private school for them was founded in 1864, at Sköfde, now there are thirty-four such institutions, all taking boarders only. Some of these are schools for feeble-minded children, some are industrial homes for those who have finished their school course, and some are asylums for idiots incapable of receiving any instruction. As a rule every school has an asylum attached to it, but in Sweden, as yet, comparatively little has been done for these hopeless cases. As in Sweden the system of small separate institutions is preferred, none of the schools have more than eighty pupils. They have three classes, each occupying a school year, as well as a preliminary class lasting two years, during which the child's aptitude for education is tested.

The subjects taught are the same as in the primary schools; mother tongue, religious knowledge, history and geography of Sweden, natural science, writing, arithmetic, drawing, and gymnastics, and, in most schools, women's work, manual work Curriculum.

with wood, brush and basket making, shoemaking, bookbinding, and gardening. The educational value of manual work is particularly great with the feeble-minded; they nearly all show facility for it, and it is an excellent means of developing their intelligence.

**Industrial
Homes.**

The industrial homes are a necessary adjunct to the schools, for the feeble-minded, in spite of their manual dexterity, do not do well in ordinary workshops amongst fellow-workers of normal endowments. Those for men are generally in the country, where the inmates are successful in husbandry and gardening. Under competent supervision they are perfectly capable of undertaking the care of cattle, and of performing the rougher kinds of farm labour. The women's homes are generally in the towns, and the inmates contribute to their own maintenance by embroidery and weaving, for which many show great aptitude, needlework and lace-making. In most of the schools the management and instruction (except manual work and gymnastics) are in the hands of women, who in Sweden are considered more apt than men to a class of teaching which makes special demands on gentleness and patience. In 1878 a training school for teachers was established at Stockholm, which now accommodates eight pupils, and gives a theoretical and practical course of instruction, occupying two years. It receives a state grant of 9,500 kr. The government also make a grant to the schools of 250 kr. per child, and to the industrial homes of 100 kr. per inmate. In 1897 all the institutions taken together had 813 inmates. The census of 1890 returned a total of 7,619 idiots (159 per 100,000 of the population).

**Teaching
Staff.**

Industrial Schools for Cripples.

These schools were introduced into Sweden from Denmark by Dr. Carlander of Gothenburg, who in 1884, while attending the Medical Congress at Copenhagen, had the opportunity of visiting the cripples' school there, watching the pupils at work, and seeing an exhibition of their productions.

Early in 1885 a society started at Gothenburg on the lines of its Danish model; funds were raised, and a school opened in the autumn of the same year, which up to the end of 1897 had a total of 135 pupils, twenty-five of whom had only one arm, twenty-seven had one or the other arm paralysed, and the remainder were all more or less infirm. The male pupils are taught carpentering, turnery, shoemaking, brush and basket making, and wood carving; and the female pupils, needlework and embroidery, marking, weaving, and knitting.

As soon as a piece of work is finished the pupils receive the payment for it in full, the school taking the risk of sale, and only deducting the cost of the materials. There are free baths at the school; the poorest pupils are given a free dinner, and the sickly ones are sent to a school summer colony for a six weeks' holiday. When the pupils have finished their training the school

does its best to find them independent employment, and gives them the necessary tools for whatever industry they have learned; the needlewomen, for instance, receive a sewing-machine.

In 1897 the school had a capital fund of 187,944 kr. The county councils of Göteborg and Bohus and of Elfsborg make a grant of two-thirds of the cost per head for a certain number of cripples, on the condition that the remaining third is paid by the commune or by some private person.

In 1890 a free orthopædic polyclinic (open twice a week) was established in connection with the school.

Similar institutions on the model of the Gothenburg school have since been established at Karlskrona and Helsingborg, and in 1890 a home, "Eget Hem," was started to accommodate forty boarders, but till now its pecuniary resources have not sufficed to support the full number of inmates.

Stockholm started an association in 1891, and opened its school the following year.

VII.—PUBLIC LIBRARIES AND MUSEUMS.

The Royal Library at Stockholm, founded by Gustavus Vasa, is the most important in Sweden. At the end of 1899 it contained about 382,000 volumes. Royal Lib-
rary, Stoc-
holm.

The communal and parish libraries (Söckenbibliotek) date from the eighteenth century, but they have only latterly attained much importance. They are maintained by private subscriptions, but it is hoped will soon receive a grant from the government.

All the gymnasia have libraries open to the public.

The university students at Upsala have founded two societies ("Verdandi" and "Heimdal") to promote the formation of public libraries, and the publication of suitable literature for the people, and the Association of Primary School Teachers has helped to found primary school libraries open not only to the scholars but to their families.

Stockholm possesses in the National Museum the most important art gallery in Sweden, it has also a fine natural history museum, and its antiquarian museum (Statens Historiska Museum) is especially rich in pre-historic Swedish antiquities. Museums.

The Gothenburg museum contains an important collection of modern Swedish works of art.

The Ethnographical Museum (now called Nordiska Muséet), founded by Mr. Arthur Hazelius, contains a historical collection illustrative of the development and civilisation of the Scandinavian peoples, which is quite unique in extent and in its peculiarly appropriate arrangement. In connection with it is an open-air museum (Skansen) of exact reproductions of the

habitations now and in the past of all sorts and conditions of Swedish men and women, from the Esquimaux hut with its dogs and "Kajaks," to the rich farms of Helland with all their dependencies, and a manor house of the fifteenth century with an interesting collection of contemporary agricultural implements.

VIII. MANUAL TRAINING (SLOYD.)

Sweden has always taken a foremost place in the movement which, opposing the old-fashioned exclusively intellectual conception of education, has striven during the last twenty years to vindicate the true importance of physical training in a rational educational system. The system of educational manual training evolved by Swedish educationalists (sloyd), and which has been adopted in many European and American countries, is intended not to train the children as artisans, but to develop them physically and morally by teaching them to use their eyes and their hands, and accustoming them to work with attention, application, and neatness. Merely considered as a rest from mental work, manual training, like gymnastics, is peculiarly valuable in counteracting the mentally and physically narrowing tendency of mere book-learning.

Sloyd teaching demands no great *amount* of work from the pupil, what it asks is scrupulously careful and conscientious execution, and this can be attained by a slow and graduated progression starting from the very simplest tasks. The instruction follows a "series of exercises" in the working of the material with one or more tools in a particular way, and with a definite object in view. The models thus produced should be æsthetic in form, and of some practical use, and the work may act as a valuable link between the school and the family if the objects made by the children can be utilised at home. The object of sloyd being to teach the child self-dependence, and to make him think and observe as he works, the teacher should never perform any portion of the pupil's task. The child's instruction in drawing should be directly connected with his sloyd training; he should first draw a sketch of the model he is to make.

The introduction of sloyd into the public school syllabus in 1890 was entirely due to private enterprise, and at the same time special schools were founded for manual training only. The provincial and municipal authorities, the agricultural societies, and, later on, the central government, came to the aid of the movement with money grants, and in 1877 the Riksdag voted 15,000 kr. a year for the encouragement of manual training for boys. By this time sloyd was being taught in 80 schools, now 3,157 schools are earning the grant.

The government seminary at Naäs (Naässlöjdlärareseminarium) for training sloyd teachers was founded and endowed in 1874, and bequeathed to the state by Augustus Abrahamson. At

first special sloyd instructors were trained in a one year's course, but in 1878 shorter courses for school teachers were opened, and these alone are now in operation. These courses, of which there are several in the year, last six weeks, and many students take two or more courses. The teaching consists in lessons and discussions on the system, methods and history of educational manual work, and in the practical construction of a series of sloyd models. The instruction at Nääs is confined to work in wood, this being the most suitable material for children between the ages of ten and fourteen, which is the age at which sloyd is generally taught in Sweden. But in some of the schools metal and paper work are taught, as well as wood-carving and turnery.

A great number of foreign teachers attend the summer courses at Nääs; between the years 1875 and 1899, 3,072 teachers passed through the school, of whom 2,302 were Swedes, 58 Norwegians, 296 English, 59 Americans, and 23 Germans. The instruction is entirely gratuitous.

IX.—SWEDISH GYMNASTICS.

The first promoter of gymnastics in Sweden was Ter-Henrik Ling (1776-1839). Before his time, indeed, attention had been paid to physical exercises, and their importance for young people had been recognised. Each University had its fencing-master; but gymnastics in the true sense, as a coherent system of physical training, were unknown. Such a system, adapted to promote the harmonious and vigorous development of the whole physical organism, was gradually worked out by Ling and his son, Hjalmar Ling, at the Central Gymnastic Institute, founded on his initiative in 1813, and is now exclusively used in Sweden. He pointed out that in order to attain its object, gymnastic training must be founded on an intimate acquaintance with the anatomical and physiological organisation of the human body as well as with the physical laws of motion, for all parts of the body act and react on each other, and blood-vessels, nerves, and muscles develop simultaneously. The true aim of gymnastics is to make this interaction and development pursue a normal and harmonious course, and to produce a calm and equable nervous condition. At the same time there must be a corrective element in physical as in moral training; it must strive to compensate weaknesses and eradicate defects. Such a system of physical training is as desirable for and suitable to girls as boys, it may be enjoyed alike by rich and poor, by the strong and the weak.

Hjalmar Ling made a classification of many thousands of movements in ten categories according to their action on the different parts or functions of the body, the movements being placed in the categories in a scale of ascending effort. In practice a certain number of movements requiring equal effort are selected from these categories to form the daily exercise, and

amongst these are interpolated movements requiring a less degree of effort, thus making the daily task "a gymnastic entity," which brings not only the separate organs but the entire organism into play. The exercise must be accurately proportioned to the powers of the pupil, and the classes so arranged that pupils of equal physical capacity work together. In order to ensure sufficient, while preventing excessive exertion, the co-ordination of movements in the daily task should be arranged to produce a constant equilibrium between the muscular labour, the respiration, and the functions of the heart; the movements must affect alternately different groups of vessels, in order to regulate the supply of blood to different parts; and the frequency of respiration must be varied at the same time that its capacity is increased. During the first half of the lesson a greater effort should be required for each succeeding movement, during the latter half the efforts should as gradually decrease, so that the end of the lesson leaves the respiration and heart action normal and vigorous. Ling discountenanced any sort of emulation in gymnastics, as tending inevitably to over-exertion and partial over-developments.

All the gymnastic instructors of the country, men and women, civil and military, are now trained at the Central Gymnastic Institute, which has more than justified the hopes of its founder. The men's courses last from one to three years, and the women's two years. The third year is especially devoted to medical gymnastics, in which a special course for doctors is also held. Short courses of instruction in medical gymnastics form part of the curriculum of the medical faculties of Upsala and Stockholm.

APPENDIX.

NOTE ON THE COMPOSITION OF THE LOCAL ELEMENTARY SCHOOL
AUTHORITY IN SOME OF THE LARGER TOWNS OF SWEDEN.

[The following note is based on information kindly supplied by Dr. Klint, of Stockholm.]

Each of the eight parishes of Stockholm has its own School Board. These several Boards are united under one Central School Commission for Elementary Education for the whole city. Stockholm.

The Commission consists of a chairman and eleven members chosen in the following manner:—(1) One by the Court of the Clergy of Stockholm; (2) one by each of the eight School Boards; (3) one by the Overseer of the Poor; (4) one co-opted by the Commission itself, preferably from among the medical men of the city. The members of the Commission elect their own chairman. If the choice falls upon one of themselves, the vacancy thus caused is filled by a new member chosen from the same category as the newly-elected chairman. The members of the Commission serve for a period of two years, half of their number only retiring at one time. If a member withdraws before his term of service has expired, a bye-election is held, the new member serving for the remainder of the term. School Commission :
how constituted.

Amongst the duties of the Commission are the following:— Duties of the
Commission.

- (1) To prepare the yearly estimate.
- (2) To apportion the State Grants and the School Taxes.
- (3) To appoint teachers, in accordance with the regulations as to qualifications, and having regard to the expressed views of the particular School Board concerned.

The School Taxes are fixed by the Parish Councils after consideration of the estimate of the Commission. If any points of difference arise in this connexion between the various parishes a joint committee is appointed by the parishes to equalise the amounts and to decide the points at issue. School Taxes.

Jurisdiction of the Commission. No Secondary Schools, properly so called, are under the Commission, but Continuation Schools and Higher Grade Board Schools are ranked as Board Schools and come under its jurisdiction, together with the Board Schools proper, or Elementary Schools.

Superintendent. The Commission appoints a Superintendent, who has supervision over all the Board Schools and the work done in them.
It is also his duty to prepare and submit to the Commission any business pertaining to his office.

Other towns. At Malmö, Norrköping, Upsala, and a few other towns there are special School Commissions, as at Stockholm, but elected in different ways. At Gothenburg the Commission consists of the rectors of the seven parishes of the city, together with at least seven (at present there are sixteen) other citizens chosen by the Town Council.

NOTE ON CHILDREN'S WORKSHOPS IN SWEDEN.

Throughout the history of education for more than two centuries we can see the struggle of two conflicting ideals. The upholders of the one ideal are inclined to an almost hierarchical organisation of society ; regard it as essential that every means should be taken through education to increase the technical efficiency of those who by birth are destined in the mass to form the labouring population ; and distrust any scheme of school training which throws the greater stress on the imparting of ideas through literature and the other constituents of what has conveniently been termed a liberal education. Those who sympathise with the other ideal regard it as of paramount importance in education to develop to the uttermost the moral and intellectual personality of each child ; believe that such development cannot be fully accomplished except through long and careful instruction in the use of the mother tongue, and through acquaintance with the great tradition of human thought as embodied in history, science, and some great works of literature. There is nothing fundamentally incompatible between these two ideals. Many of those who lay stress on the first are earnestly desirous that every child in the nation should be given access to the intellectual and moral ideas which are enshrined in great books, and for the proper study of which some large measure of linguistic training is indispensable. Those, on the other hand, who incline to the second ideal are ready to admit that manual labour under present conditions will be necessarily the lot of the great majority of the human race, and that an education which actually disqualifies a child from fulfilling the duties of that lot is mischievous, however well intentioned. But each view is liable to a characteristic defect. The first may be applied in a reactionary and selfish spirit, so as to deprive the children of their share in the heritage of human culture : the other view may be so applied as to deprive the children of those opportunities of early training in and familiarity with handicraft which are the natural preparations for skill in manual labour. Consequently the history of education shows a constant reaction between one tendency and the other, and Sweden is at the present time the scene of an interesting compromise, or a working agreement, between the two tendencies. The fundamental aim of the people's school of the reformation period was to enable every boy and girl to read the Scriptures, to learn how to express themselves in writing, and to receive the moral impression which is conveyed by earnest religious teaching in an atmosphere of intense religious conviction. But the school is only part of education.

Environment and atmosphere, far more than direct instruction, make up educational influence. It was in the home that the children received nine-tenths of their training for life. The home part of their education was largely practical and manual, for they were brought up in the midst of active home life and from their earliest years initiated into the various domestic arts and sciences. Thus the school was only a supplementary part of education; it supplied the greater part of the literary and some of the disciplinary part of the child's training. But it was found that, in order to make the most of the opportunities offered by the school, the work of the school should be systematised and deepened. It was not considered enough to give children the power of using the instruments of culture—*i.e.*, reading and writing; it was sought by thoughtful schoolmasters actually to teach them how to take the first steps in the understanding of literature. Gradually, therefore, the claims of the school upon the children's time and strength increased, and there was a tendency for the literary instruction to gain at the expense of that more practical training which was given chiefly at home or in the workshop. This rather one-sided development produced a reaction, and during the earlier part of the last century there was a decided movement to make popular education more practical and manual and less literary. But here again the pendulum swung too far, and the schools of industry became a by-word for narrow and stunting discipline and for the absence of those elevating and invigorating ideals which are an essential part of true education. Then came the revolutionary movement, with its strong impulse towards the recognition of the rights of each individual and the development of every human personality. In Pestalozzi the two complementary ideals of education found balanced support. He eloquently claimed for each child a measure of that true education which liberates from prejudice, ignorance and vice, but at the same time he maintained that this education ought to be given in close connection with manual training—and with definitely practical exercises resulting in the production of things actually useful in themselves. In spite of his advocacy and example, the two tendencies parted once again, and the revolutionary movement, identifying itself with the reaction against the schools of industry, began rapidly to develop a system of school training in which manual exercises were virtually non-existent. *Pari passu* the growth of the factory system, and the consequent decay of domestic arts and industries, dealt a serious blow at the counter influence of the home as safeguarding the practical side of the child's education. Child labour in factories was not educative; the scandals attending it provoked the passing of the Factory Acts, and the impression made by these scandals has not yet been effaced. The school was regarded as an asylum from the factory, and every additional hour of school attendance, won at the expense of the factory, was greeted as a victory in the cause of humanity. Nevertheless, excess once more produced reaction, and an earnest endeavour was made by a number of distinguished

leaders of educational thought in Finland and Scandinavia, in Great Britain and America, to introduce drawing and other manual exercises in carefully graded educational sequence as an essential part of the primary school curriculum. But it is always difficult to carry out with uniform success a great reform of this far-reaching character. It was difficult to correlate these practical subjects with other and more abstract topics of instruction; it was difficult to find instructors who were both skilful in the art of teaching and competent to give manual instruction of the kind desired. We know how successfully these difficulties have been surmounted in a great number of cases, but the place taken by manual training in the ordinary curricula of elementary schools is far from satisfactory to those who are strongly convinced that for a large number of children instruction through doing something useful is by far the most effective kind of education. The result is that there are signs in several countries of a strong movement of opinion which would provide at least an alternative to the ordinary day school for the large numbers who positively prefer a more practical training, and would graft on to the more strictly educational courses of manual instruction, handicrafts and even simple manufacturing processes, which are not without interest, are not laborious, but do introduce an element of skill. It will be seen, therefore, that opinion on this subject is in a condition of great unrest, and that on both sides of the controversy there are intermingled good and bad elements, while nothing is more difficult than to maintain with efficiency the middle course.

Sweden is the home of the specifically educational form of manual training known as Sloyd, and the influence of the seminary at Naäs (founded by A. Abrahamson in 1874, and now under the direction of Mr. Otto Salomon) has affected educational ideas and practice over nearly the whole world. Sloyd was, in effect, a protest against a too-bookish kind of school training on the one hand and the idea of a merely industrial training on the other.

There is now springing up in Sweden a strong movement in favour of a definitely practical system of education, and hence the institution of a number of Children's Workshops or Homes of Industry (*Arbetsstugor*). The objects of these are threefold:—

First.—To take charge of poor children or of children whose parents, engaged in factories or elsewhere during the day, are unable to supervise them. The hope is to thus save young children from the dangers of the street, particularly from the temptation to spend the hours in which they are not at school in begging or casual street trading.

Second.—To inspire early in a child a love of work, to equip the child with manual dexterity, and to put it in the way of gaining an honest living later on by steady application to some regular trade or occupation.

Third.—To supplement pedagogic influences and discipline by a discipline and by influences analogous to those to be found in a thoroughly good working-class home.

The movement began in Denmark and Finland, and thence it spread to Norway and Sweden, and the following figures attest the growth of its popularity. The first workshop was started at Stockholm in 1886, and there are at the present time thirty-nine schools in the kingdom, twelve of which are situated in Stockholm and are attended by 1,500 children—a fact which challenges attention, as the total number of children in the elementary schools of the capital is but little over 27,000.

These workshops are attended during the six winter months by children between the ages of seven and fourteen. To some extent advantage is taken of the special knowledge of the elementary school teachers in selecting the children for attendance, the poorest and those who are known to be neglected at home being considered to have the first claim. The younger children (i.e., between seven and ten) work at the homes of industry between eleven and one, and, after taking dinner there attend the ordinary elementary school in the afternoon. The older children come to the workshops at five o'clock three evenings a week, work for two hours, and receive their supper before going home. A certain number of children, whose home surroundings entitle them to special consideration, are permitted to stay from one o'clock to half-past seven; part of this time they spend in preparing their home lessons for the next day, part in play, and they do two hours' manual work. They receive both dinner and supper. These meals are regarded as a reward for the children's labour.

The management of these workshops is undertaken by ladies of the leisured class without fee; but they are assisted by salaried female teachers and, so far as regards the trades, by skilled artisans.

The cost of these homes is not great; each receives on its foundation a grant of from 700 to 1,400 francs from the Lars Hierta Fund to cover the cost of equipment. The cost of maintenance is defrayed by gifts, by the sale of the children's work, by public grants. The Municipal Council of Stockholm gives an annual grant of 23,000 francs and the parochial authorities generally give the buildings free of charge and a small subvention. The average cost of maintenance (including salaries of teachers and artisans, cost of materials, lighting, heating and food) amounts to about 20 francs per head per annum.

Under its local committee each home works independently, and is free to follow its own line of development, but there is a central committee which supervises the working of all the homes.

The occupations practised are numerous and varied; they include tailoring, dressmaking, shoemaking, cobbling, mending of clothes, weaving, plaiting, basket-making, brush-making, mat-making, carpentry, cabinet-making, wood-carving, metal-work, toys, small ornaments for Christmas trees, raphia-work, and so on.

The central committee are always ready to take advantage of any new models that present themselves. The raphia-work men-

tioned above is due to the interest of the foundress of the homes—Fru Hierta-Retzius—who, while travelling in Sicily, noticed the artistic and serviceable work with twisted palm leaves practised by the inhabitants, and learned to manipulate raphia in a similar manner and introduced it to the workshops in Sweden. A central museum has been started at Stockholm for the reception of these models gathered from various parts of the Continent.

It is desirable that students of education should carefully watch this new development of opinion. As has been pointed out above, there is a strong feeling that much harm has been done in education by ignoring the value of practical training and giving children an education which is too detached from the practical interests and future claims of daily life. On the other hand, nothing would be more undesirable than that the ethical and humane sides of education should be swamped by a merely utilitarian course of training. What is wanted is a just balance between the two tendencies.† Not, however, a tepid compromise between them, but the recognition of the fact that different children profit by quite different types of education; that some gain most from a curriculum predominantly literary, others from a curriculum predominantly practical, but that in no case should the training be wholly one sided, because that the literary child needs a practical element in his training, just as the practically-minded child needs to be brought into sympathy with the ideas which are embodied in good literature.

J. G. LEGGE.
M. E. SATLER

July, 1901.

APPENDIX.

Appended is a syllabus of a course of lectures for Tailors' Instruction in Industrial and Technical Schools, and also a syllabus of lessons on the theory and practice of Shoe-making. Both these are used in the English Reformatory and Industrial Schools. They will be read with interest as illustrating, from a somewhat different point of view, the movement in favour of giving a more practical turn to education. In estimating their value we must bear in mind that in the class of schools for which they are designed, an ambition to rise by hard, steady work has to be fostered to a degree unnecessary, perhaps, with children of happier origin, and that, as here the school is also the home, a compromise between the literary or abstract and the concrete or practical views on education becomes imperative.

SYLLABUS

OF A

COURSE OF LECTURES

FOR

TAILORS' INSTRUCTION

IN

INDUSTRIAL AND TECHNICAL SCHOOLS.

PREPARED BY

MR. W. D. F. VINCENT.

Extract from Introduction.

"The compiler is an expert and an enthusiast. He treats his subject with an artist's pride in his craft, but his zeal is illuminated by humour, a moral quality deserving encouragement. Thus he is void of the offence from which all good teachers pray to be delivered: he is not dull."

J. G. LEGGE

SYLLABUS OF LECTURES.

LECTURE 1.—THE ADVANTAGES OF TAILORING.

1. Not laborious.
2. Pursued in comfort.
3. Supplies a universal want.
4. Ample scope for intelligence.
5. Healthy.
6. Fairly paid.
7. No bar to the highest positions.

General aim to inspire the lad with a good opinion of the tailoring trade, offering the highest scope for advancement.

LECTURE 2.—"THE NINTH PART OF A MAN,"

Origins of the term.

Nine men who were tailors.

1. Andrew Johnson (President).
2. Sir William Harpur (Philanthropist).
3. Admiral Hobson (Sailor).

4. John Jackson (Painter).
5. George Joyce (Soldier).
6. Francis Place (Politician).
7. Robert Blomfield (Poet).
8. Stulz (Philanthropist).
9. George Thompson (Slave Advocate).
- J. G. Whittier (Poet).

General Elliott, afterwards Lord Heathfield, Defender of Gibraltar.

John Boccold, the tailor who became King (see also "London Art Fashion Journal," January, 1898).

LECTURE 3.—THE ANATOMY OF THE BODY.

Bones and Joints. 1. Joint, Ball and Socket. 2. Joint Hinges. 3. Joints gliding. Human figure symmetrical. Muscular development. Parts where the bones always remain near surface of skin. (a) Waist. (b) Thigh. (c) Calf. (d) Shoulder.

Prominences and Depressions. Where they exist. (a) Blades. (b) Breasts, etc.

Fatty Increment. (a) Waist at front. (b) Thighs at top and inside. (c) Arm-pits. (d) Legs shorter.

LECTURE 4.—PROPORTIONS OF THE BODY.

Proportions, 7 to 8½ heads, chin, nipples, navel, pubic organs, high, calf, ankle, extended arms equal height.

LECTURE 5.—HISTORICAL GARMENTS.

Joseph's Coat of many colours.

Achan's "Babylonish Garments."

Herod's Suit of silver.

The Holy Coat of Treves.

The Coat of Nessus.

Penelope's Shroud.

Cato's Coat, "too costly for a conscientious Roman."

Invisible clothes, Hans Andersen.

The Mad Coat.

Sir Walter Raleigh's Cloak.

The Enchanted Shirt.

LECTURE 6.—THE HISTORY OF DRESS.

Fig leaves. Coats of skin. Joseph's Coat and its significance. Joseph's vesture. Chains of office. Achan and the beautiful Babylonish garment. Egyptian clothes. Grecian clothing. Roman styles. The evolution of English dress.

LECTURE 7.—THE PHILOSOPHY OF CLOTHES.

Sartor Resartus. Clothes enable us to indicate rank and authority. The experience of Glasgow police superintendent. How clothes indicate character. Charles Dickens's "Meditations in Monmouth Street." "Sketches by Boz."

LECTURE 8.—WHAT CLOTHES ARE MADE FROM.

Why man is not supplied with clothes by nature, as animals. The three kingdoms of nature. 1. Minerals oldest. Decoration and dyeing. Carlyle on clothes, "Wanted for Decoration." Buttons, laces, dyes, etc. 2. Vegetable. Mostly used for underclothing or wear in hot climates. Fig leaves, Cotton, etc. 3. Animal, outer garments, Silk, Wool, Fur, Coats of skin, Leather.

LECTURE 9.—GREAT AUTHORS WHO HAVE WRITTEN FOR TAILORS.

Thomas Carlyle: "Sartor Resartus." John Ruskin: "Lectures at Manchester." Charles Kingsley: "Alton Locke." Oliver Wendell Holmes: "Evening." Sir Walter Besant: "All Sorts and Conditions of Men."

LECTURE 10.—REVIEW OF "SARTOR RESARTUS."

LECTURE 11.—REVIEW OF RUSKIN'S LECTURES.

LECTURE 12.—REVIEW OF KINGSLEY'S "ALTON LOCKE."

LECTURE 13.—REVIEW OF SIR WALTER BESANT'S "ALL SORTS AND CONDITIONS OF MEN." ‡

LECTURE 14.—MINERALS USED FOR CLOTHING.

Leading minerals. 1. Metals. (a) Iron. (b) Brass. (c) Silver. (d) Gold. 2. Stones. (a) Jewels. (b) Asbestos. (c) Dyes and other substances. Where and how these are obtained. Iron ore from mines. Brass compounds from copper and zinc. Silver from mines. Gold from mines and fields. Jewels from mines, diamond fields. Asbestos from Corsica, etc. Dyes, coal, etc. How used. Threads, Buttons, Lace, Embroidery, Filling. How to distinguish.

LECTURE 15.—VEGETABLE MATERIALS USED FOR CLOTHING.

1. Cotton. 2. Linen. 3. Jute. 4. Dyes, where obtained. 1. Cotton plant. 2. Flax plant. 3. Jute plant. 4. Dyes. Various sources. How used. 1. Threads for sewing. 2. Fibres for scribbling. 3. As warps for cheap clothes. 4. As materials, such as Calico, Linen, Cord, Velveteen. How to distinguish linen, finer and stronger than cotton. Cotton finer and stronger than jute. The use of the microscope.

LECTURE 16.—ANIMAL MATERIALS USED FOR CLOTHING.

1. Wool. 2. Hair. 3. Fur. 4. Leather, with or without Fur. 5. Silk. 6. Feathers. 7. Fish bones and skin. 8. Dyes. Where obtained: Wool from sheep. Angolas, Crossbreeds. Hair from horses, camels, etc. Fur, Rabbits, etc. Leather, Chamois, Seal, Bear. Silk worms. Feathers, Birds. Pearls, Shark-skin and Whalebone, Ocean. Dyes, Cochineal.

LECTURE 17.—PECULIARITIES OF MINERAL CLOTHING.

1. Heavy: The weight of Drum-Major's coat. Coats of mail. Diver's dress. Lifeguard's dress. 2. Costly: Cloth of Gold. Jewelled Garments. Historical instances. Lord Mayor's Livery. Official Court Dress. 3. Liability to tarnish or rust: Covered buttons and iron moulds. Laced coats. 4. Non-inflammable asbestos garments. 5. Wear-resisting: Suits of mail in the Tower. 6. Non-absorbent of water. 7. Stiff and unyielding.

LECTURE 18.—PECULIARITIES OF VEGETABLE CLOTHING.

1. Inflammable. The Sunderland Disaster.
2. Practically unshrinkable, hence all form has to be produced by cut V's, puffs; easier washed, and so more cleanly.
3. Good conductors of heat, generally cold to the touch. Illus.: Lin sheets.
4. Less retentive of moisture than wool. Illus.: Fent.
5. Holds dressing, i.e., starch, etc.
6. Wear-resisting, Fustian.

LECTURE 19.—PECULIARITIES OF ANIMAL CLOTHING.

1. Slow inflammability.
2. Shrinkable, thus enabling it to be moulded to any shape.
3. Bad conductor of heat, and so warmer to touch.
4. Some varieties irritating to the skin.
5. Absorbs and retains moisture.
6. Wear-resisting.

LECTURE 20.—MINERAL MANUFACTURED GOODS.

1. Buttons, Trousers, Livery, Fancy.
2. Lace, Military, Naval, and Diplomatic Uniforms.
3. Cloth, united with other substances.
4. Crests, monograms, and names on caps and coats.
5. Garments, Lifeguard's Breast Plate, Chain Coats.
6. Filling and Dyeing of Cloth.

LECTURE 21.—VEGETABLE MANUFACTURED GOODS.

Calico, Canton, Linen, Quilting, Silesia, Marcella, Khaki, Cambric, Gambroon, Casban, Flannelette, Pocketing, Swansdown, Rubber Cloth, Wadding.

LECTURE 22.—VEGETABLE MANUFACTURED GOODS—(*Continued*).

Cotton, Drill, Stay-tape, Fustian, Huckaback, Cord, Turkey Twill, Velveteen, Drabette, Dungaree, Dandy Canvas, French Canvas.

LECTURE 23.—ANIMAL MANUFACTURED GOODS.

Woollen Cloth, Silk Mixtures, Worsted Coatings, Estamenes, Vicuna Coatings, Bedford Cords, Serges, Woollen Coating, Homespun, Silk Velvet, Cheviot, Cashmeres, Tweeds, Carlyle.

LECTURE 24.

Astrachan Cloth, Meltons, Sealskin Cloth, Beavers, Tattersall Vesting, Pilots, Corded Silk, Elysians, Twill Silk, Naps, Moscows, Watered Silk, Venetians, Velours, Satarras.

LECTURE 25.

Barathea, Doeskin, Ottoman, Broad Cloth, Satins, Refines, Kersey, Silk Serge, Whipcord, Satinette, Flannels, Silk Faced Serges, Russell Cord, Worsted for Darning.

LECTURE 26.

Saxony Cord, Legee or Twill, College Cloth, Sealskin, Alpaca, Beaver, Italian Cloth, Astrachan, Victoria Twill, Sable, Verona, Chamois, Glissade, Buckskin, Pasha Cloth.

LECTURE 27.

Doeskin, Mohair Twill, Shaloon Plush, Lasting, Feather Trimming, Satinette, Padua Serge, Bunting, Domets, Silk Braid, Mohair Braids, Edging Cord, Sewing Silk.

LECTURE 28.—QUALITY IN MANUFACTURED GOODS.

1. Purity. 2. Weight. 3. Finish. 4. Design. 5. Character or class. Shoddy, short fibre, wool, medium length of fibre. Worsted long fibre and fine twist. Unions: (a) Cotton and Wool. (b) Wool and Silk. (c) Wool and Gold.]

LECTURE 29.—THE CLOTHES MOTH.

What it is. How to keep away. The fur moth.

LECTURE 30.—POINTS CONNECTED WITH CLOTH WEAVING.

Warp, Woof, Selvage, Charley or Pile, Crease edge, Width, Finish, Patterns, Wool Combing, Wool Cording, Wool Opening, Ancient and Modern Machines.

LECTURE 31.—DYEING.

Materials used, Piece Dyeing, Printed Pattern, Yarn Dyeing, Testing Dyes, Dangerous Dyes, Difficult Colours, Re-dyeing.

LECTURE 32.—COLOUR AND COMPLEXION.

All Colour depends on Light. Primary Colours, Red, Blue, and Yellow; Warm Colours, Red and Yellow; Cold Colour, Blue; Binary Colours, Violet, Green, Orange; Colour Combinations, Complementary Shades, Red and Green, Yellow and Violet, Blue and Orange; Harmony of Analogy, Dark and Light Shade Effect of Colours; Contrasting hues intensify; White brightens, Black deadens, Grey harmonises two discordant tints. Dark people look best in warm shades, fair people in cold shades. Tertiary shades, Olive, Citrine, and Russet; Complementaries, Olive and Orange, Russet and Green, Citrine and Violet. White increases apparent size, Black reduces, Grey normal.

LECTURE 33.—MOURNING CUSTOMS AS THEY RELATE TO CLOTHES.

The sentiment of colour. Ancient customs. Foreign customs. English customs for civilians, livery servants, naval and military officers. How it affects trade.

LECTURE 34.—PATTERN OF MATERIAL AND PEOPLE.

Loud patterns attract attention. Neat patterns pass unobserved. Stripes add to height or width as they run. Checks add to width without adding to height. Herringbone, peculiar effects, Spots, Twills, Self colour by pattern or designed Twill, Corkscrew, Hopsack, Dress Twill, Pinhead, Rough Surface, Embossed Surface.

LECTURE 35.—ORNAMENTATION.

Laws of (1) Repetition. (2) Alternation. (3) Symmetry. (4) Progression. (5) Balanced Confusion, how applied. Buttons, Braids, Stitchings, Strappings, Preparations, Seams.

LECTURE 36. BUYING THE CLOTH.

Calculating the Quantity. Value of book on Economy. Trade allowances 1 inch per yard, 5 extra inches in 10 yards, on ends $\frac{1}{2}$ inch extra per yard, thus 36 yards 18 inches, on pieces $\frac{1}{2}$ inch per yard, 60 yards 30 inches extra in addition to 37 inches per yard. This does not apply to silk and cotton goods. Cash and Discounts, Patterns, Carriage.

LECTURE 37.—COUNTING THE COST.

Materials, Trimmings, Making, Rates of Profit, Proportionate, and Fixed Sums.

LECTURE 38.—SELLING THE CLOTH AND TAKING THE ORDER.

Find out what customer wants. Take stock of customer and show suitable goods. Show variety, but do not confuse. Detect his fancy, and press home choice if suitable. Remember it's customer's suit not yours. Book order carefully. Attention to details. Never sell a customer what he does not want. Be obliging.

LECTURE 39.—THE ART OF MEASURING.

The aim to find out size and shape of customer. Necessity of method. Various methods. 1. Breast measures. 2. Admeasurements. 3. Direct measurements. Need for observation of customer's peculiarities. Urgent need to find out fancies. Detail and illustrate how to measure for Coat, Vest, Trousers. Practice makes perfect.

LECTURE 40.—TAILORS AND TAILORING IN FAIRY TALES.

- "How the Fairies made a Coat."
- "The Tailor who Killed Three at a Stroke."
- "The Tailor who Pricked the Elephant's Trunk."
- "The Tailor who Thrashed his Son."
- "The Tailor who Married a Princess."

LECTURE 41.—REVIEW OF LORD CHESTERFIELD'S LETTERS TO HIS SON.

LECTURE 42.—NATIONAL PECULIARITIES OF FORM AND FASHION.

English contrasted with French, German, American, Australian and other nations, in their build of figure and style of garment worn.

NOTE.—These subjects are taken as the basis of a weekly article in the *Tailor and Cutter* (weekly edition) for 1901.

THE THEORY AND PRACTICE OF SHOEMAKING.

Reformatory and Industrial Schools Office,
June, 1901.

The following syllabus has been drawn up by the principal Instructor of the Northamptonshire County Council, Mr. E. Swaysland, whose name will be a guarantee for sound doctrine in the matter of shoemaking. Great Britain holds a leading position in this trade, and any instructor who resolutely sets himself to teach boys on the lines laid down by Mr. Swaysland may rest assured that he is up to date. He will turn out good shoemakers. More than that, he will turn out good craftsmen, and perform in leather the service that the ordinary manual instructor of the elementary schools performs in wood. No one expects all the latter's pupils to become cabinet makers, but from the manual instruction class, whatever the material, all pupils should carry away something of the workman's touch, hand should have been trained to work in concert with eye, the habit acquired of taking and recording precise measurements, and, by the application of drawing, a capacity developed of drafting as well as executing a piece of work. And so, whether our young shoemaker sticks to his last or goes off at a tangent, he ought, if taught as Mr. Swaysland would have him taught, to carry with him a general equipment fitting him to do well whatever job he takes in hand.

The first part of the syllabus contains suggestions for conversational lessons, which are calculated to convey a good deal of general information, as well as to stimulate a boy's interest in his work.

The second part explains itself; it is a carefully graduated three-year course of practical and theoretical instruction. Each year's work covers all the seven branches into which the subject is conveniently and, for elementary purposes, exhaustively divided. Thus a boy will not have to wait until his last year before he gets some inkling of the most attractive portions of his trade, he will not be forced to *specialise* on a particular

branch of a trade before he realises in the least what his capacity and wishes are. In many of the schools there are capital collections of specimens, diagrams, and models suitable for illustrating a reasoned course of instruction such as is here presented. These aids are not difficult to obtain, and without them the course will be of little value. It will be in danger of degenerating into a series of object lessons without objects.

JAMES G. LEGGE.

FIRST PART.

TOPICS SUITABLE FOR CONVERSATIONAL LESSONS.

The meaning of the words "boots," "shoes," "cordwainer," and "shoemaker."

The history of shoemaking. Egyptian shoes, the fashion among the Romans when they came to England, what the Ancient Briton then wore for shoes, and the alterations in style to the present day. How the Cordwainers' and Leather Sellers' Companies originated, what they were for, what they did, and what they now do for the boot and shoe trades.

II.

The variety of materials used in shoemaking. How a single boot may contain materials from both land and sea animals, from worms, reptiles, vegetables and minerals. How the parts are put together by hand, by steam power, or blown together by compressed air.

III.

The beauty, art, and knowledge displayed in this trade, its usefulness and the benefits derived from it. How shoes and shoemakers have affected history.

IV.

Eminent men who from working shoemakers have become clergymen, lawyers, inventors, great sailors and soldiers, statesmen, doctors, and merchants. Thus by their example showing what can be done by those who are earnest and industrious.

V.

The shape of the foot, its arches and points of contact, the bones, muscles, and skin. The great difference between the upper and sole skins. The difference between the great and the small toes. How people stand, walk, and run. The Lascar, American Indian, professional walker, and the soldier's walk. The difference between walking and running.

VI.

The shape of the uppers used in ancient times. The Egyptian grass shoes, Roman sandal, British buskin, modern Spanish rope bota, Blucher, Wellington, and Derby boots. The boots and shoes worn by our soldiers and sailors.

VII.

Where the materials for the uppers come from. French calf, German kid, American split, Russian hide, English kips, and fancy leathers. The animals whose hides and skins are used, ox, cow, calf, sheep, goat, kid, horse, quagga, seal, porpoise, lizard, crocodile, dog, and kangaroo.

VIII.

• Sewing the uppers together. In ancient times by thongs, sinews of animals, and chewed hide. In modern times with silk, linen, jute, flax, and cotton threads. How a thread is made, by hand, by machine.

IX.

• Where the leather for the soles comes from. The hides of the elephant, buffalo, bull, and oxen from South America, India, Africa, China, and Spain. Where the best come from, why some are branded, some much cut about, some scratched.

X.

The ancient methods of fastening the soles to the uppers by threaded cords, by straps, by nailing, sewing the bottoms, "folding" the soles, stitching with human hair, hemp, flax, and silk. The origin of rivetted boots. Why pegged boots were first made.

XI.

Finishing or decorating foot wear. The ancient jewelled sandal, gilded and gold wire wove shoes. The colouring of boots and shoes. How the "finish" has altered from ancient to the present times.

XII.

How to obtain work as a shoemaker : (a) in a factory, where work is done by machinery ; (b) in a small shop, where work is done by hand. Cobbling, "boots mended while you wait." Usefulness of a knowledge of shoe-making to a soldier. A shoe-making soldier a genuine handy-man, e.g., in South Africa.

SECOND PART.

THE PRACTICAL COURSE.

FIRST YEAR.—CLASS I.

A.—*The Foot and the Last.*

(i.) The form of the sole of the foot, actual bearing surface, method of obtaining an "impression" of the surface upon which we stand.

(ii.) Sectional shape of foot compared to shape of last, difference between inner and outer sides, position of great toe, alteration in the shape of foot during walking. How a last is measured.

B.—*Pattern Cutting.*

(i.) Exercise in marking centre line of last and direction of lines of measurement. The top of last only to be marked—why?

(ii.) Method of producing the paper "form" of the side and of the bottom, drawing upon the form the lines of measurements described in Class I., Subject "A." (ii.) ; Class I., Subject "B." (i.).

C.—*Cutting out the "Tops."*

(i.) Where the best of the leather should be, and why. What should be the appearance of leather used in the top parts for strong boots.

(ii.) The different kinds of leather used for strong and for light boots, waxed leather, grained leather, glazed leather, kid. Their relative durability.

D.—Fitting and Machining.

(i.) How the edges of the tops are stitched together, the different kinds of stitches, where they are used and why.

(ii.) Where the parts overlap, how they are "skived," the different kinds of seams, welt seams, plain seams, lap seams, open stitching, specimens of different stitches—hand, machine, lock, loop.

E.—Rough Stuff Cutting.

(i.) The leather used for soles, insoles, and heels. Which should be hard and which mellow. The difference between the flesh and the grain. How to tell soft from mellow leather.

(ii.) Different kinds of leather for soles, oak (English), red (American), pink (Australian). How they differ and what each kind is used for. Leather for insoles, welting and heel stuff, shoulders, bellies, and sides.

F.—Making.

(i.) How the uppers are pulled over and fastened to the insoles. How the soles are fastened, simple seams as rivetting or pegging. Examination of specimens in section showing rivetted or pegged work.

(ii.) What constitutes lasting, the order in which the operations should be gone through, and what is the effect. The difference between through seams and "welts." In what the hand-made waxed cord differs from the machine-made waxed thread.

G.—Finishing.

(i.) How and why the edges of soles and heels are smoothed, effect in appearance and wear, knifing, rasping, sandpapering. The colour should match the top.

(ii.) The relation between the prepared edge and the finishing iron. What condition the bottoms should be in for different styles of finish. The difference between gum finishes, stains, and paints. How they are prepared.

SECOND YEAR.—CLASS II.

A.—The Foot and the Last.

(i.) Taking the measurements and shape of the foot for bespoke orders. How to take a "draft" and set out the dimensions. Fitting up the last for the order taken, allowances and deductions.

(ii.) The shape and measurements of various kinds of lasts—flat, round, and inner ridge lasts. Meaning of such terms as spring, pitch, twist, and range as applied to lasts.

B.—Pattern Cutting.

(i.) Relation between the last and the leg of the boot. Construction lines for upper patterns. Connecting a form made from a last fitted up in Class II., Subject "A." (i.), to the construction lines.

(ii.) Explanation of such terms as pitch, spring, and inclination as applied to upper patterns, variations in pitch required for lasts shown in Class II., Subject "A." (ii.). Allowances for seams and lasting over. The production of a complete pattern for uppers.

C.—Cutting out the "Tops."

(i.) The shape of skins, good shape, bad shape. How patterns may be arranged to cut with little waste, systems of cutting for large clear surfaces.

(ii.) The growth of skins and hides, direction in which they are tight. Reasons for and methods of cutting tight to toe, and tight across. How to cut to avoid flaws.

D.—Fitting and Machining.

(i.) The preparation of the parts of the tops for machining. Fitting; how the parts are held together—by paste, cement, and soap. "Fitting on the flat," "fitting on a block."

(ii.) Machining—materials used, silk, cotton, and linen threads. The length of stitches for different classes of work, how a bad seam may be detected.

E.—Rough Stuff Cutting.

(i.) The shape of butts, bends, and sides. Which parts of them are best. How to cut them up to advantage. The parts of which are "prime" and which are "offal." What each quality is used for—wetting, rolling, hammering.

(ii.) Ranging and cutting soles and insoles, straight ranges for whole soles, for spliced soles, curved ranges for whole soles, for spliced soles, cutting without ranging. Which is most economical? Proof of economy in each method.

F.—Making.

(i.) Different methods of lasting—forward, backward, re-lasting, back lasting. The effect of the different strains upon the boot. Experiments in the effect of pulling in different directions, heel building.

(ii.) How lasting machines work, bed machines, wipers, and tackers. How the work is prepared for the machine. In what the machine differs from hand work. How the boot is affected by the seams, "direct" and "indirect" attachments, machine heels.

G.—Finishing.

(i.) How special edges are produced, the shape and use of cutters and irons, blind, jigger, crease, hollow-faced, square-faced, pump irons. Tools for shaping edges. Heel shaves, planes, ploughs, burnishers and setters.

(ii.) The effect of scouring and wetting upon edges and bottoms, setting up cold, putting into colour, setting and burnishing. How to make yellow, red, fawn, brown, and black edges and bottoms.

THIRD YEAR.—CLASS III.

A.—The Foot and the Last.

(i.) Methods of producing sole shapes of various types to given measurements, "Standard" dimensions of lasts, difference between fittings, girths, widths, and lengths.

(ii.) What constitutes a set of lasts, the difference in shape and in dimensions between lasts for infants and those for adults. Some details of the units of measurement used for last measurements, zero points upon the size-stick.

B.—Pattern Cutting.

(i.) Cutting the sectional parts of patterns for uppers from standards produced during previous lesson. For soles from shapes produced in Class III., Subject "A." (i.).

(ii.) How to cut a set of patterns for uppers from patterns produced in previous lessons, for bottoming parts from patterns produced in Class III.

Subjects "A." (i.) and "B." (i.), and to measurements given in Class III. Subject "A." (ii.).

C.—Cutting out the "Tops."

(i.) Essential difference between hides and skins, horse, cow, ox, calf, sheep, goat, kid, and seal, kip, split, satin hide. How leather is measured by weight, by area.

(ii.) Tanning and tawing processes—simply chemical experiments demonstrating the conversion of skin into leather, vegetable tannage, mineral tannage, tawing, currying and leather dressing, detection of bad leathers.

D.—Fitting and Machining.

(i.) Different methods of closing tops—set up, raw edge, beaded, bound, turned in, and bagged. *Some one* method of fitting and machining an ordinary shoe and a boot.

(ii.) The working of sewing machines, the meaning of such terms as tension, pull down, take up. Simple explanation of the action of shuttles, reciprocating, oscillating, and rotary. The essential difference between silk, linen, and cotton threads—how to detect bad threads, "spun" silk, and twist.

E.—Rough Stuff Cutting.

(i.) Relative weight of the different leathers. How and why a highly priced leather may be cheaper than a lower priced. How to detect wasteful leathers. The appearance of good leathers, upon the grain side, flesh, cut section, specimens of pure tannages.

(ii.) Source of bottom stock, hides, ox, cow, bull, market, dry-salted, wet-salted, branded hides. How leather is made (see Class III., Subject "C." (ii.)). The effect in appearance, weight, and value: of oak bark, valonia, hemlock, mimosa, diva diva, and sumach as tanning agents. Cause of stains. Simple experiments with sulphate of iron and solution of tannic acid, and iron nails and leather.

F.—Making.

(i.) The essential difference between hand and machine made work. As regards lasting in pull, pleat, and draft. As regards attachment in vertical, horizontal, or combined method. Examination of the different seams in section—hand sewing and stitching, lock stitch, loop stitch.

(ii.) The different kinds of lasting machines, bed machines compared to vertical machines and to hand methods. The effect of the different methods of lasting and attachment on the appearance and wear of the boot. How the attachment of waist and heel affect the flexibility, rivetted seats compared to sewn seats, sew-rounds compared to welts.

G.—Finishing.

(i.) Finishing machinery. The use of machine substitutes for hand tools. Heel trimmers, edge trimmers, heel burnishers, edge setters, bottom scourers, brushes, and pads. The routine of finishing by machine.

(ii.) Different types of finishing machinery—hot kit process, cold kit process, finishing by friction, by brush and pad, stoning. The use of slosh and paint, recipes for black and coloured stains, fakes, paints and sloshes, speed of machines and vibration, effect on work in quality and quantity.

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THE
NOBEL FOUNDATION
AND THE
NOBEL PRIZES.

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THE NOBEL FOUNDATION AND THE NOBEL PRIZES.*

I.—INTRODUCTION.

Alfred Bernhard Nobel, the inventor of dynamite, died in 1896, leaving the residue of his great fortune, estimated at about £2,000,000 sterling, for the foundation of five annual prizes, to be awarded for the most important discoveries in Physics, Chemistry, and Physiology or Medicine, for the most remarkable literary work of an idealist tendency, and for the greatest service rendered to the cause of peace during the year. The value of each prize will be about £8,000.*

An official French translation of the Statutes and Regulations relating to the Nobel Foundation has just been issued.† The original documents received the sanction of the King of Sweden on June 29, 1900.

The Statutes and Regulations are somewhat complicated in form. It was thought, therefore, that it would be useful to summarise and to rearrange to some extent the more important of them, and this has been done below. The Statutes and Regulations are paragraphed separately, but it has been found more convenient to give references to pages of the French text and paragraphs occurring on these pages. Where cross references are given to the pages of the present summary, the words "above" or "below" are added.

It will be seen that the text of the will has received a liberal interpretation. In addition to the prizes, provision is made for the establishment of Nobel Institutes where researches may be carried on, and of Special Funds from which grants may be given to promote the objects which the Founder had at heart; and both Institutes and Special Funds are likely, to say the least, to be quite as productive of good as the great prizes.

It will be noticed that the benefits of the Foundation are to be open to all nationalities without distinction. No restriction of sex is mentioned in the Statutes. (See p. 163, note†, below.)

Alfred Bernhard Nobel, the Founder, was born at Stockholm on October 21st, 1833. He was taken by his father to St. Petersburg in 1837, returned to Stockholm in 1859 and studied chemistry there‡. In 1862 he set up factories for the manufacture of one of the most powerful explosives known, nitro-glycerine, a liquid compound discovered in 1847, but not previously utilised. Nitro-glycerine is liable to be exploded by even a slight mechanical shock. In 1864 Nobel's own laboratory

* See the *Times*, 1st December, 1900, p. 13.

† Fondation Nobel. Statuts et Règlements. Traduction officielle. Stockholm : L'Imprimerie Royale, P. A. Norstedt & Söner, 1900. 8vo, p. 23.

‡ According to Poggendorff's *Literarisch-biographisches Handwörterbuch* etc. (iii., p. 974), he was self-taught.

was blown up, and in 1866 serious accidents in different countries led to proposals for making its use illegal. Nobel then discovered, in the year 1867, that by mixing nitro-glycerine with certain solids in the form of powder, it could be rendered portable without danger, and detonated at will by means of a cap of mercury fulminate. The powder chiefly used has been a kind of siliceous earth called *kieselguhr*, but various substitutes are used in different places and for different purposes;* the mixtures of nitro-glycerine with such solids are well known by the general name of *dynamite*. Nobel set up some twenty dynamite factories in various parts of the world, and thousands of tons are manufactured annually for military uses, for mining, for blasting rocks in the channels of harbours and other similar operations. Nobel also invented other explosives, the most famous being blasting gelatine, and a smokeless powder obtained by treating nitro-cellulose with nitro-glycerine. He also had a cannon foundry at Bofors, and made various scientific investigations on the action of explosives on the bore of cannons, on the power of explosives, and on artificial india-rubber. Nobel in 1869 set up his laboratory at Saint Séveran, near Paris; in 1891 he removed to San Remo, and died there on December 10th, 1896.

During his lifetime he gave generously to the objects in which he was interested, and subscribed half the cost of the ill-fated *Andrée* expedition to the North Pole.†

II.—EXTRACT FROM THE WILL OF DR. ALFRED BERNHARD NOBEL.

The Nobel Foundation is based on the will of Dr. Alfred Bernhard Nobel, dated November 27th, 1895, of which the following passage contains the stipulations with regard to the Foundation:—"The residue of my realisable property left after my death shall be disposed of as follows: The capital, invested in safe investments by the executors of my will, shall constitute a fund of which the interest shall be distributed annually as a reward to such persons as have rendered to humanity the greatest services during the preceding year. The total amount shall be divided into five equal parts, and allotted, one [part] to the person who has made the most important discovery or invention in the physical sciences; another [part] to the person who has made the most important discovery or the greatest improvement in chemistry; the third to the author of the most important discovery in the domain of physiology or medicine; the fourth to the person who has produced the most remarkable literary work of an idealist tendency‡; and, finally,

* Nobel gave a demonstration of the use of sand at Merstham on July 14th, 1868. See the *Times*, December 15th, 1896.

† The biographical facts here given are mainly derived from an article by M. Léon Sagnet in the *Grande Encyclopédie*.

‡ The text runs, "à celui qui aura produit l'ouvrage littéraire le plus remarquable dans le sens de l'idéalisme." It is obviously open to some difference of interpretation.

the fifth to the person who has done most, or laboured best, for the cause of fraternity among different peoples, for the suppression or reduction of standing armies, or for the formation and promotion of peace congresses.

The prizes shall be awarded as follows:—For Physics and Chemistry by the Swedish Academy of Sciences*; for work in Physiology and Medicine by the Caroline Institute of Stockholm*; for Literature by the Stockholm Academy*; and, finally, for the Cause of Peace, by a Commission of five members elected by the Norwegian Storting.* It is my express desire that in the award of the prizes no account shall be taken of nationality, so that each prize may go to the most worthy, whether he be Scandinavian or not.

An agreement was made with certain heirs to a smaller portion of Dr. Nobel's property, by which they renounced the inheritance for themselves and their heirs, on the express condition that—

(a) The general Statutes regulating the award of the prizes by the competent authorities should be drawn up in concert with a delegate representing the Robert Nobel family, and submitted for approval to the King of Sweden.

(b) That certain permanent regulations, stated on p. 165, § 6, below, should be passed with regard to the award of the prizes.

The Statutes and Regulations relating to the Foundation as a whole, and those relating to four out of the five Sections corresponding to the five subjects for which prizes will be awarded, are summarised below. The Regulations relating to the "Peace" Section, which is under the control of the Norwegian Storting, have not yet been issued. (For these see Appendix A.)

III.—THE STATUTES.†

(1) *The General Fund.*§

1. The General Fund is to be controlled by a Council of Administration, composed of five members, of Swedish nationality, sitting at Stockholm. The president is to be nominated by the King of Sweden. The four other members are to be elected by

* For an account of the constitution of these bodies see pp. 172, 173 below. They are designated collectively in what follows as the "Corporate Bodies." According to the Statutes (p. 4, § 2), the term "Stockholm Academy" is intended to mean the Swedish Academy.

† No mention is made of any restriction of the prizes to persons of the male sex, although the masculine pronoun is used throughout in the French text.

‡ The Statutes may be altered hereafter, under certain conditions, by the Corporate Bodies named in the will and the Council of Administration (p. 9, § 22).

§ The term used is "la fondation." I have preferred to render it by the expression "General Fund" to correspond with the term "Special Fund" used later.

a body of fifteen representatives, chosen by the Corporate Bodies named in the will. (See 2, below.)

A deputy is also to be elected to act in the absence of the president, and two deputies are to be elected for each of the other members of the Council.

The members and deputies will be elected in future for a period of two years, the term of office beginning on May 1st (p. 7, §§ 14-16). But two of the members of the first Council, selected by lot, will retire, after a single year of office, so that in future two may retire annually. (*Dispositions Transitoires*, p. 9, 1.)

The Council will elect one of its members as "director and administrator" (*directeur-gérant*) (p. 7, § 14).

2. Of the fifteen representatives, six are to be chosen by the Academy of Sciences (for the two Sections of Physics and Chemistry), and three are to be chosen by each of the other Corporate Bodies. In addition the Academy of Sciences will nominate four deputy-representatives, and each of the other Corporate Bodies two, to act for representatives prevented from so doing.

The representatives will hold office for two years. They will elect a president from among their number. Nine representatives will form a quorum (p. 7, § 16).

In certain cases (p. 8, §§ 17-19) the representatives may be called on to control the management of the Foundation by the Council.

3. The functions of the Council include the payment of the money value of prizes to the prize winners and the payment on requisition of all expenses incurred in the award of prizes, the payment of sums due to the Nobel Institutes, and of sums required for all other purposes (p. 7, § 15).

4. One-tenth of the net annual revenue from the General Fund is to be added to the capital; and the interest on sums for prizes not awarded is also to be added to the capital till such sums have been returned to the General Fund or transferred to a Special Fund (p. 8, § 21). (See also below, pp. 167, 169, 170, 172.)

(2) *The Nobel Prizes.*

1. The prizes are to be awarded as a rule annually (p. 3, § 1). The first award of prizes in all the Sections will take place, if possible, in 1901 (*Dispositions Transitoires*, p. 9, 3).

2. For a work to be admitted to compete for a prize it must have been printed and published (p. 4, § 3).

3. In order to be admitted to the competition each work must be proposed in writing by some person or body of persons qualified to do so. Regulations defining the categories of persons qualified to propose works for the competitions are given below under the Special Regulations for the various Sections. No person may propose his own work (p. 5, § 7).

4. Each proposal must be accompanied by the written works and documents on which the proposal is based, and by a written statement in support of the proposal. The Corporate Body with whom the award of a prize lies shall be dispensed from pro-

ceeding to a detailed examination of any proposal in the following cases: (1) if the proposal or works presented are not written either in one of the Scandinavian languages or in English, French, German, or Latin; (2) if the majority of the Corporate Body in question would be required, in order to appreciate the proposed work, to acquaint themselves with a memoir written in a language of which the interpretation would entail special difficulties or considerable expense (p. 5, § 8).

5. The proposals received from the previous 1st of February to the 1st of February in each year shall be considered together (p. 5, § 7). The will prescribes that prizes shall be awarded for work done "in the preceding year," but this expression is to be taken to mean "that the object of the awards shall be [as a rule] the most recent fruit of efforts in the fields designated in the will, but [that it may be] older work in [exceptional] cases where its importance has only recently been demonstrated (p. 4, § 2).

6. If no work be regarded as deserving of a prize in any Section the amount of the prize is to be held over until the next year; if the prize be not awarded then, the money may be either returned to the General Fund by the Corporate Body concerned or invested to form a Special Fund for the Section, the income from which is to be used to promote the chief objects of the Founder, otherwise than by the award of a prize (p. 5, § 5). (See also under Special Funds, below, p. 167.) In accordance with an agreement made with certain heirs of Nobel, referred to on p. 163, above, it is stipulated, for all future time, that in each Section a prize shall be awarded at least once in each consecutive period of five years; and that the value of the prize given shall not be less than sixty per cent. (60%) of the total amount available for the prize, and that it shall not be divided into more than three prizes (pp. 3, 4, § 1). The present Statutes provide that the amount of a prize may be equally divided between two works, both being judged worthy of the prize (p. 4, § 4).

A prize may be awarded to the joint work of two or more collaborators (p. 4, § 4).

The Corporate Bodies are allowed to decide if prizes within their respective jurisdictions may, or may not, be awarded to an institution or a society (p. 4, § 4).

7. The four prizes for Physics, Chemistry, Literature, and Medicine will be awarded by the Corporate Bodies named in the will, after receiving a report in each case from a special committee, to be called a Nobel Committee, and consisting of three or five members elected by the Corporate Body concerned. The "Peace" prize will be awarded by a Commission of the Norwegian Storting in accordance with the terms of the will. Members of the Nobel Committees and of the Commission of the Storting may be of foreign nationality. In special cases the Corporate Bodies concerned may add to the Nobel Committees additional members possessing special competence.

Members of the Nobel Committees may receive a suitable remuneration for their work, to be fixed by the Corporate Body concerned (p. 5, § 6).

8. Against the decisions with regard to the award of prizes no appeal can be made.

If in the deliberations with regard to the award any difference of opinion should arise, it shall neither be mentioned in the minutes of the proceedings nor otherwise revealed in any way (p. 6, § 10).

9. A solemn assembly will be held on the 10th of December in each year, the anniversary of the death of the founder, at which the Corporate Bodies charged with the award of the prizes will publicly announce their decisions, and will present to each successful candidate an order for the amount of his prize, a diploma, and a gold medal bearing the effigy of the donor, and an appropriate inscription (p. 6, § 9).

10. Each prizeman is bound, unless he is prevented from doing so (*à moins d'empêchement*), to deliver a public lecture on the subject of the work to which the prize was awarded. The lecture in the case of the first four prizes is to be delivered at Stockholm, in the case of the "Peace" prize, at Christiania (p. 6, § 9).

(3) *The Nobel Institutes.*

11. The Corporate Bodies named in the will are empowered to found scientific institutions or other establishments in order to insure the provision of competent assistance in examining works proposed for the prizes, and to further in other ways the objects of the Foundation.

Such institutions and establishments are to be called Nobel Institutes* (p. 6, § 11).

A sum of 300,000 kronor (£16,875†) is to be allotted to each Section for the foundation of an Institute, but the whole or any portion of this may be reserved for the Special Fund of the Section (*Dispositions transitoires*, pp. 9 and 10, 4). The Institutes will receive annually one-fourth of the income from the General Fund available for each Section, less the expenses involved in the award of the prize for the Section (p. 6, § 13). [The Physico-Chemical Institute may receive, according to the Regulations p. 15, § 20, grants from the Special Funds for Physics and Chemistry.]

12. Each Nobel Institute will be placed under the direction of the Corporate Body by which it has been founded. It will, however, have an independent existence, and the funds allotted to it will be reserved entirely for the purposes of the Institute, and must not be used by the Corporate Bodies, or any other institutions, to supplement their ordinary annual expenditure. The learned officials of the Swedish Institutes in receipt of a fixed

* As will be seen from the special Regulations given below, three such Nobel Institutes are at present contemplated: a Physico-Chemical Institute, a Literary Institute, and a Medical Institute.

† At the rate of 1s. 1½d. to the krona.

salary will not be allowed to occupy any other similar post at the same time without the express authorisation of the King of Sweden. Persons of foreign nationality, men or women, may hold posts in connection with the Institutes (p. 6, § 12).

(4.) *The Special Funds.*

13. Each Section will have a Special Fund. This will be constituted in the first instance by such a portion of the 300,000 kronor mentioned on p. 166 above as the Section may wish to reserve for this purpose, or, if no Institute be founded for the Section, of the whole amount (*Dispositions Transitoires*, pp. 9, 10, 4). If a prize have been withheld for two consecutive years, and, if three-quarters of the members of the competent body present vote for the proposal, the money will be transferred to the Special Fund for the Section; such amounts will otherwise be returned to the General Fund (p. 5, § 5).

The income from the Special Funds is to be used to promote the chief objects of the Founder in some way other than by the award of prizes. [For details of the Special Funds in the different Sections see below.]

IV.—SPECIAL REGULATIONS FOR THE SECTIONS OF PHYSICS AND CHEMISTRY.

The Nobel Prizes in Physics and Chemistry.

The Corporate Body for these Sections is the Swedish Academy of Sciences.

1. The following persons are to be entitled to nominate competitors for the prizes, in accordance with the Statutes (p. 11, § 1; see also p. 164 (2), 3, above):

- (i.) Swedish and foreign members of the Royal Swedish Academy of Sciences (referred to hereafter as "the Academy").
- (ii.) Members of the Nobel Committees for Physics and Chemistry.
- (iii.) Persons who have received a Nobel prize from the Academy.
- (iv.) The ordinary and extraordinary professors in physical and chemical science at the Universities of Upsala, Lund, Christiania, Copenhagen, and Helsingfors, the Caroline Institute of Medicine and Surgery of Stockholm, the Royal Higher Technical School of Stockholm, and the professors of the same sciences occupying permanent posts at the *Ecole Supérieure* of Stockholm (*Stockholms Högskola*).*

* This institution, although it does not bear the name of University, is of University rank.

- (v.) The occupants of similar chairs in, at least, six Universities, or places of higher education (*Écoles Supérieures*) to be chosen by the Academy, so as to distribute the mandate suitably among different countries and their universities.
- (vi.) Such persons as the Academy may see fit to invite to act (p. 11, § 1).

2. The Nobel Committees for Physics and Chemistry shall each consist of five members, in accordance with the Statutes, four being chosen by the Academy, and the fifth being the director of the corresponding section of the Nobel Physico-Chemical Institute. The members other than the director shall hold office in general for four years; one member shall retire each year, but shall be re-eligible (p. 11, § 2).

The four members of the first committee elected will, in each case, retire successively at the end of 1901, 1902, 1903, and 1904, the selection of the retiring members being determined by lot. (*Dispositions Transitoires*, p. 15, 16.)

If any member leave a Committee another member shall be elected for the unexpired term of office (p. 11, § 2).

3. The Nobel Committees shall in the month of September issue invitations to all persons qualified under paragraph 1 above to send in, before the 1st of February of the following year, proposals for prizes, with a statement of the grounds on which the proposals are made (p. 12, § 6).

Each of the Nobel Committees shall report to the Academy before the end of September in each year; the corresponding sections of the Academy (together with any additional member of the Academy, if the section think necessary) shall report to the Academy during the month of October; and the Academy shall come to a final decision before the middle of November (p. 12, § 7).

No documents, reports, or proposals of the Nobel Committees with regard to the award of prizes shall be published or revealed in any manner (p. 12, § 8).

The Nobel Physico-Chemical Institute.

4. The Academy is empowered to found, in virtue of the Statutes, a Physico-Chemical Institute of which the immediate purpose shall be to control discoveries in Chemistry and Physics proposed for Nobel Prizes. The Institute, so far as its resources allow, will also encourage researches in the domain of physical and chemical science from which important results may be expected (p. 13, § 12).

The Institute shall contain two sections—one for Physics and one for Chemistry. The buildings for the two sections shall adjoin one another, and there shall be for common use, a council-chamber for the Nobel Committees, muniment room, library, etc. (p. 13, § 13).

The Institute is placed under the supervision of an inspector nominated by the King of Sweden (p. 14, § 14). Each of the

be under the charge of a director, Swedish or foreign, elected by the Academy on the proposal of the corresponding member of the Academy; the director is to be a man of high standing and *must* *avoir acquis une réputation solide* and possess extensive knowledge of the science concerned. He will have the rank of professor (p. 14, § 14).

Special Funds for Physics and Chemistry.

The income from the Special Funds (see p. 167 above, § 13), may be devoted to one of two purposes:—

- (i.) It may be used, firstly, by the Academy, in accordance with the chief objects of the Founder, to make grants for work in Physics and Chemistry, which appear to be of scientific or practical value. Such grants shall be made in preference to persons whose work has already yielded results deserving to be completed with the help of the Nobel Foundation. Proposals for subventions shall be made in the first instance by the Nobel Committee concerned, and submitted to the Academy, reported on by its corresponding section, and finally decided on by the Academy as a whole.
- (ii.) The income may be used, secondly, for the purposes of the Physico-Chemical Nobel Institute (p. 15, § 20).

V.—SPECIAL REGULATIONS FOR THE SECTION OF LITERATURE.*

1. The Corporate Body for the Section is the Swedish Academy.

According to the Statutes (p. 4, § 2) the term "literature" in the will is intended to apply not only to purely literary works, but to all other works possessing from their form and style literary value.

The Nobel Prize in Literature.

2. The following institutions and persons are to be entitled to nominate competitors for the prizes, in accordance with the statutes (p. 17, § 1 of the original; see also p. 164 (2), 3, above).

- (i.) Members of the Swedish Academy (referred to hereafter as "the Academy") and members of the French Academy and the Spanish Academy, which resemble this Academy in their organisation and aims.
- (ii.) Members of the literary sections of other academies, and members of literary societies similar to academies.†
- (iii.) University professors of Aesthetics, Literature, and History.

* The Special Regulations published contain no details with regard to the election and functions of the Nobel Committee, or the award of the prize such as are furnished for the Sections of Physics, Chemistry, and Medicine.

† It will be somewhat difficult to determine what institutions in the United Kingdom, and the British Empire generally, come under this category.

This regulation is to be published at least once every five years in an official journal or in one of the newspapers most widely read in the three Scandinavian countries and the principal countries of the civilised world (p. 17, §1).

The Nobel Literary Institute.

3. The Institute will include an important library devoted chiefly to modern literature. The Academy will nominate a librarian with one or more assistant librarians, and also a number of qualified literary assistants, titular and supernumerary, whose duty it will be to draw up reports on questions relating to the prize, and on recent foreign literature, and to execute such translations of foreign works as may be required.

The Institute will be placed under the supervision of an inspector nominated by the King of Sweden, and under the immediate direction of one of the members of the Academy, nominated specially by this body (p. 17, § 2.)

The Special Fund for Literature.

4. The Academy has power to use the Special Fund to encourage, in accordance with the chief objects of the Founder, all literary activity, in Sweden and abroad, of such kind as may be regarded as of importance to civilisation, especially in the intellectual domain to which it is the duty of the Academy to devote its attention and care. (See p. 172, below.)

VI.—SPECIAL REGULATIONS FOR THE SECTION OF MEDICINE.

1. The Corporate Body for the Section is the Caroline Institute of Medicine and Surgery.†

The Nobel Prize in Medicine.

2. The following persons are to be entitled to nominate competitors for prizes in accordance with the Statutes (p. 20, § 5: see also p. 164, (2), 3 above).

- (i.) Members of the College of Professors of the Caroline Institute (referred to hereafter as "the College of Professors").
- (ii.) Members of the Section of Medicine of the Royal Swedish Academy of Sciences.
- (iii.) Persons who have received the Nobel Prize for Medicine.
- (iv.) Members of the Faculties of Medicine of the Universities of Upsala, Lund, Christiania, Copenhagen, and Helsingfors.
- (v.) Members of at least six Faculties of Medicine, chosen by the College of Professors, so as to distribute the

° The term "Medicine" used alone in the Special Regulations is obviously intended here to include Physiology, in accordance with the terms of the will (see p. 162, above).

† See p. 173 below.

mandate suitably among different countries and their universities.

(vi.) Such persons as the College of Professors* may see fit to invite to act.

3. The Nobel Committee shall consist of—

- (a) Three members elected by the College of Professors to serve for a period of three years, one member retiring each year,† of whom one is to be selected by the College of Professors as president, and a second as vice-president,
- (b) Two members elected by the College of Professors in March (after they have received a preliminary report on the prize competition), to serve till the end of the civil year.

Specialists may also be added to the Committee by the College of Professors, if they see fit (p. 19, § 2, and p. 20, § 6).

4. The Nobel Committee shall in the month of September, issue invitations to all persons qualified (under § 2, above) to send in before the 1st of February of the following year proposals for prizes, with statements of the grounds on which the proposals are made (p. 19, § 4).

The Nobel Committee shall classify the memoirs received from the previous 1st of February to the 1st of February in each year, and shall submit them with a memorandum to the College of Professors in the first half of February. The College of Professors shall elect in the first half of March the two members of the Nobel Committee mentioned under § 3 (b) above, together with one or more specialists, if necessary, to serve as supplementary members on the Committee.

The Nobel Committee shall then decide which of the memoirs presented shall be submitted to a special examination, and arrange for this examination. The Nobel Committee shall then report to the College of Professors in April, and the College shall decide at the first meeting in May, if further memoirs are to be submitted to special examination. No memoir shall receive the prize unless it shall have been specially examined. The Nobel Committee shall deliver its final report and proposal for the award of the prize in September, and the College of Professors shall make the award in October (p. 20, §§ 6-9).

The Nobel Medical Institute.

5. The Nobel Medical Institute will be founded and organised in accordance with the decisions of the College of

* The text here uses the word *Académie*, instead of *Collège de Professeurs*, but this is obviously a slip.

† Of the members of the Committee first elected, two will be selected by lot to retire after serving for one year, and two years, respectively. — *Dispositions Transitoires*, p. 22).

Professors, as soon as the College regards the funds at its disposal for the purpose as sufficient. It will be placed under the supervision of the Chancellor of the Universities of Sweden.

Before the Institute is opened for active work, detailed regulations with regard to it will be submitted to the approval of the King of Sweden (p. 21, § 12).

The Special Fund for Medicine.

6. The income from this fund is to be used, in accordance with the chief objects of the Founder, to encourage medical research and its applications, otherwise than by the award of prizes.

The disposal of the income will rest with the College of Professors (p. 22, §§ 13, 14).

VII.—THE CORPORATE BODIES MENTIONED IN THE WILL OF THE FOUNDER.*

The Royal Academy of Sciences (*Kongl. Vetenskaps Akademien*) of Stockholm was founded in 1739. Its present statutes bear the date July 13th, 1850. Its object is to encourage the sciences, to aid in their development, and to spread scientific knowledge by means of printed publications.

The King of Sweden is the patron of the Academy, which includes 100 Swedish and Norwegian, and 75 foreign members. The national members are divided into nine sections, as follows:—

- | | |
|---------------------------------------|--|
| I. Pure Mathematics. | VII. The Medical Sciences. |
| II. Applied Mathematics. | VIII. Technology, Economics, and Statistics. |
| III. Applied Mechanics. | IX. The Sciences and Scientific Professions generally. |
| IV. Physical Sciences. | |
| V. Chemistry, Geology and Mineralogy. | |
| VI. Botany and Zoology. | |

The president of the Academy is elected annually and there are several other officers, including a perpetual secretary, whose especial business it is to manage the affairs of the Academy.

The Swedish Academy (*Svenska Akademien*) of Stockholm was founded on March 20th, 1786, by Gustavus III., and at the same time received its statutes, which are still in force. It is devoted to literature, including both prose and poetry; and the chief object of the Academy is to labour for the purity, the vigour, and the elevation of the Swedish language, in scientific works, and especially in the various branches of poetry and prose, including those which serve for the interpretation of religious

* The accounts given here of the first three bodies mentioned are translated from the "Notice" printed at the end of the Statutes and Regulations in the French text.

the duty of the Academy to compile a dictionary of the Swedish language, and to publish treatises to strengthen and develop literary taste (*le bon goût*). It also awards annual prizes for competitions in prose and poetry. The King is the patron of the Academy. The Academy consists of eighteen members, who must be of Swedish nationality. The officers include a director, a chancellor, and a perpetual secretary.

The Royal Caroline Institute of Medicine and Surgery (*Kongl. Karolinska Medico-Kirurgiska Institutet*) of Stockholm, dates from the year 1815. The statutes at present in force received the sanction of the King of Sweden on April 29th, 1886. The Academy corresponds to a Faculty of Medicine, and has the same powers as the Faculties of Medicine in the Universities of Upsala and Lund. The Institute carries on the theoretical and practical teaching of the medical sciences, and awards diplomas to medical students by examination.

The direction and administration of the Institute are in the hands of a Rector, elected by the College of Professors from among the members. The present number of Professors is thirty-three.

The Norwegian Storting is the Legislative Assembly of Norway. It is elected indirectly by universal suffrage triennially. It consists of 114 members.

P. J. HARTOG.

* The text of the official French translation is as follows: "Elle a pour mission principale de travailler pour la pureté, la force, et l'élevation de la langue suédoise, tant dans les travaux scientifiques que particulièrement dans la poésie et l'éloquence dans toutes ses parties, aussi dans celles qui servent à l'interprétation des vérités religieuses."

APPENDIX A.

PROVISIONAL SPECIAL REGULATIONS FOR THE "PEACE"

SECTION.*

The following provisional special regulations have been issued by the Commission of five members elected by the Norwegian Storting†, with regard to the Nobel Prize to be awarded to "the person who has done most or laboured best for the cause of fraternity among different peoples, for the suppression or reduction of standing armies, or for the formation and promotion of peace congresses."

1. The following persons are to be entitled to nominate competitors for prizes in accordance with the Statutes (p. 5, § 7):

- (i.) Members of the Norwegian Nobel Committee.
- (ii.) Members of the legislative assemblies, and governments of the various States [of the world].
- (iii.) Members of the *Conseil interparlementaire*.‡
- (iv.) Members of the *Commission du bureau international permanent de la paix*.
- (v.) Members and Associates of the *Institut de Droit international*.
- (vi.) University professors of law, of political science, of history, and of philosophy.
- (vii.) Persons and associations who have already received the Nobel "Peace" prize.

2. Proposals for prizes must be sent in to the

Comité Nobel Norvégien,
Victoria Terrasse, 3,
Christiania, Norway.

* These regulations were not received from the Norwegian Government until after the foregoing pages were printed. References, except where followed by the word "above," are to the pages and sections of the official French translation of the Regulations and Statutes of the Nobel Foundation. See p. 161 above.

† MM. B. Getz, Steen, John Lund, Björnstjerne Björnson, and J. Lövland.

‡ The Council of the Interparliamentary Union, composed of a number of groups of members of various legislative assemblies "in favour of peace."

As a rule, proposals from the previous 1st of February to the 1st of February in each year will be considered together, for the award of the year.

Proposals for the prize for 1901 may, however, be sent in so as to reach the Committee not later than the 1st of April 1901.

3. The Norwegian Nobel Committee, in accordance with the Statutes (p. 4, § 4), has decided that institutions and societies shall be eligible for the "Peace" prize.

For the general regulations relating to the Nobel prizes, see pp. 164-166 above.

P. J. H.

APPENDIX B.

The ceremony of distributing the four Nobel prizes took place at Stockholm on December 10th, 1901, at 7 o'clock. Each prize was of the value of 200,000f. The prize for medicine was awarded to Dr. Emil Adolf Behring, of Halle, the prize for chemistry to Professor Jacobus Hendrikus van't Hoff, of Berlin, the prize for physics to Professor Wilhelm Konrad Röntgen, of Munich, and the prize for literature to M. Sully Prudhomme.—(*From the "Times" of Dec. 11th, 1901.*)

The Peace Prize was awarded to Monsieur Henri Dunant of Geneva (founder of the Red Cross and originator of the Geneva Convention), and to Monsieur Frédéric Passy of Paris (founder of the French Society of the Friends of Peace, since merged into the Paris Arbitration Society.)

THE TRAINING AND STATUS OF PRIMARY AND SECONDARY TEACHERS IN SWITZERLAND.

"All the provisions hitherto described would be of none effect if we took no pains to procure for the public school thus constituted an able master, and worthy of the high vocation of instructing the people. It cannot be too often repeated that it is the master that makes the school. And, indeed, what a well-assorted union of qualities is required to constitute a good schoolmaster! A good schoolmaster ought to be a man who knows much more than he is called upon to teach, that he may teach with intelligence and with taste; who is to live in a humble sphere, and yet to have a noble and elevated mind, that he may preserve that dignity of sentiment and of deportment, without which he will never obtain the respect and confidence of families; who possesses a rare mixture of gentleness and firmness, for, inferior though he be in station to many individuals in the commune, he ought to be the obsequious servant of none—a man not ignorant of his rights, but thinking much more of his duties; showing to all a good example, and serving to all as a counsellor; not given to change his condition, but satisfied with his situation, because it gives him the power of doing good, and who has made up his mind to live and to die in the service of primary instruction, which to him is the service of God and his fellow-creatures. To rear masters approaching to such a model is a difficult task; and yet we must succeed in it, or else we have done nothing for elementary instruction."

(From a Speech by M. Guizot in introducing a Bill on Elementary Education to the French Chamber of Deputies in 1832.)

"Looking at the training of teachers, we strive to make men and women competent for the difficult duties which the task of educating our people lays upon them, to equip them with knowledge, and to fill them with enthusiasm for the work which is to enable our future generations to accomplish, with increasing strength and clearer insight, those tasks in the civilisation of the world which Providence has marked out for the German people."

(From Prof. Rein's paper on "Tendencies in the Educational Systems of Germany," in vol. iii. of Special Reports on Educational Subjects.)

THE TRAINING AND STATUS OF PRIMARY AND SECONDARY TEACHERS IN SWITZERLAND.

I.—THE NUMBER OF TRAINING COLLEGES IN SWITZERLAND.

It may safely be asserted that in no country in Europe is the importance of training for the teacher more clearly recognised than in Switzerland,* as will be at once apparent when we state that this little country, with an area about twice that of Wales and a population of about three millions, had in 1895 no fewer

* Each of the 25 cantons has its own independent school organisation (see Mr. R. L. Morant's paper on *The Organisation of Education in Switzerland* in vol. iii. of *Special Reports*). To show the completeness of the cantonal supply let us take the case of Bern, whose population and area are about the same as those of Gloucestershire. In 1894 its establishments for public instruction were as follows:—

I. PRIMARY DEGREE.

1. 2,085 *Primary Schools* with obligatory instruction for 8 years after 6 years of age.
2. 1,536 *Schools of Sewing* with obligatory instruction for 9 years.
3. *Higher Primary Schools* with a somewhat more advanced programme than No. 1.
4. *Continuation Schools* for lads after they have left the primary school. Attendance is compulsory in communes which have adopted them. Nos. 3 and 4 were only introduced in 1894.

II.—SECONDARY DEGREE.

1. 69 *District Schools* receiving the pupils at 10 years of age and having a 5 years' course.
2. *The Cantonal School* at Porrentruy.
3. *The Gymnasium* at Bern.
4. " " at Berthoud.

Nos. 2, 3 and 4 receive pupils after 10 years of age. They give first to all the scholars a 3 years' course without ancient languages. Then the pupils divide into two sections, the Literary Section and the Real Section, each with a course of $5\frac{1}{2}$ years.

5. *School of Commerce* at the Gymnasium of Bern, with a course of 4 years.

III.—SUPERIOR DEGREE.

1. *University of Bern*,† with faculties for theology, law, medicine, and philosophy (including science and letters). It contains a Higher

† It should be observed that there are five universities in Switzerland.

than 42* State or Private Training Colleges. A list of these will be found in Appendix I. Of the seminaries there mentioned, only two (Lucern 1775, and Aarau 1822) were in existence prior to the revolutionary movements throughout Switzerland which led to the overthrow of the old aristocratic oligarchies in 1830 and 1831. No sooner did the cantonal governments become thoroughly democratic than popular education underwent an enormous development, and Training Colleges were established in rapid succession throughout the country.

Of the 42 institutions whose sole purpose is to train elementary school-teachers a few general facts may be stated. They contain altogether about 2,600 students, the men having a small and diminishing majority. Twenty-three of the colleges are for men, 18 for women, and in one (Küsnacht near Zurich) the sexes study side by side. Twenty-five of the colleges are German, 15 French, and 2 Italian. Again, of the 42 seminaries 29 belong to the State (*i.e.* the respective canton), 3 belong to the communes in which they are situated, and 10 are under private management. Each State Training College and its annexed practising school have for their management and superintendence a commission of usually seven members appointed by the Education Council of the canton, and the Director of the college is generally an advisory member of the Commission, whose term of office is commonly from four to six years.

But perhaps one of the most significant facts for us to observe is that only 23 of the institutions are Training Colleges pure and

Training College for preparing candidates of both sexes for the Secondary Teachers' Certificate.

2. *The Veterinary School* at Bern.

3. *The School of Fine Arts*, for designing, painting, and modelling.

IV.—SPECIAL ESTABLISHMENTS.

1. *Training College at Hofwyl*, for training German-speaking male teachers for primary schools.

2. *Training College at Porrentruy*, for French-speaking male teachers.

3. *Training College at Hindelbank*, for German-speaking female teachers.

4. *Training College at Delémont*, for French-speaking female teachers.

5. *Training College at Secondary School for Girls* at Bern.

6. *Institution for Deaf Mutes* at Münchenbuchsee, where they receive primary instruction and learn handicrafts.

The supply of schools in Canton Zurich is even more complete; but what county in Great Britain having a population of 54,000 can boast of an educational equipment like this?

* This excludes 7 or 8 secondary schools that give instruction in the theory of education, and in this and other respects resemble Training Colleges.

simple, the other 19 forming part of Higher Primary* Schools, or of Secondary Schools and Gymnasias. In these higher schools the future teachers receive the same general education as those about to enter the Universities or preparing for scientific and commercial pursuits, but there are, of course, special classes and arrangements for the professional training of the pupils intending to become teachers. During the last ten or fifteen years it has been much discussed in Switzerland which of the two methods gives the better equipment for a teacher, and the teachers of several cantons have declared themselves strongly in favour of the higher-school system.† Indeed, in recent years two or three Training Colleges (*e.g.* in Zug and Solothurn) have passed over into the other category. There is a great deal to commend such a course, for nothing is more detrimental to a profession than too early specialisation. If teachers, even until the age of sixteen, studied side by side in our higher schools with those preparing for the other professions and walks of life, they would doubtless gain much in width of outlook and of culture.

It will be seen from Appendix I. that only one University in Switzerland undertakes the training of the elementary school-teacher, viz., the University of Basel. The Great Council of the canton has since 1892 granted 6,000 francs per annum to the University to arrange a special course of 1½ or 2 years for those about to become primary teachers.

II.—CONDITIONS OF ADMISSION TO TRAINING COLLEGES.

There are no pupil-teachers in Switzerland. That system, indeed, has now been discarded by the whole of Europe except Britain and some of the poorer villages of Russia. The candidates for admission to the Swiss Training Colleges get their preparatory education, as a rule, in a primary school, and thereafter two or three years in a higher primary school (see the second column of Appendix IV., in connection with which it should, however, be mentioned that more and more of the colleges are requiring that the entrants shall have spent at least two or three years in a *Sekundarschule*).

The minimum age for admission is generally 15, but in some

* A *Sekundarschule* in Switzerland does not correspond to a secondary school in this country. It is just a higher grade elementary school, with an additional three or four years' course for carrying on the education of the pupil to the age of 15 or 16 on the same lines as in the ordinary elementary school. Schools of the same grade as our secondary schools are called Middle Schools (*Mittelschulen*, *Écoles moyennes*, or cantonal schools) in Switzerland. As this peculiar nomenclature of the Swiss schools might cause misunderstanding we shall in this Report call the *Sekundarschulen* Higher Primary Schools, and the *Mittelschulen* Secondary Schools.

† As early as 1865, 1871, and 1887 the elementary school teachers of canton Zurich recommended that candidates should receive their general education at the Cantonal Secondary Schools, and that the professional training should be given by institutions specially organised for the purpose, or by the University.

places it is as high as $17\frac{1}{2}$ or 18. As an example of the regulations which an applicant has to fulfil, let us take those recently issued for the College of Münchenbuchsee (Hofwyl) in canton Bern.*

Conditions of
admission to
Training
College of
München-
buchsee,
canton Bern.

Along with the application the following certificates have to be sent : 1, a certificate of birth ; 2, a medical certificate on the state of health, and on any constitutional weaknesses, of the candidate ; 3, a certificate from the teacher of the candidate concerning his upbringing and education, to be attested and added to by the Committee of the School, as well as, if possible, by pastors' certificates.

The candidates must (1) be natives of the canton or sons of parents settled in the canton. In exceptional cases those not resident in canton Bern can be admitted if they pay the full cost of their maintenance and education ; (2) have attained the age of 15 on 1st April of the year of admission ; (3) be free from bodily infirmities which would interfere with their future work as teachers ; (4) produce favourable certificates of moral character ; and (5) not have been already twice rejected because of unfitness.

The preliminary conditions having been fulfilled, the candidates have to pass a written and oral examination in Religion, Singing (violin and piano optional), German, French, Arithmetic, Mensuration of surfaces and solids, Natural Science (elements of physics and chemistry, physiology of the human body, the most important native animals, cultivated plants, and minerals), History (general history from the Reformation up to 1848, and Swiss history from the establishment of the Federation in that year), Geography (Switzerland, and the most important European countries and food-growing countries throughout the world, mathematical geography), Drawing, Gymnastics.

In this college last spring (1899) out of 46 applicants 23 were admitted, while at Hindelbank, also in canton Bern, 29 girls out of 55 were admitted.

In this and most of the other cantons the successful candidates are taken at first on trial for a longer or shorter period (usually three months), and then those are definitely admitted on whom the teachers report favourably.

III.—LENGTH OF COURSE AND SUBJECTS OF INSTRUCTION IN SWISS TRAINING COLLEGES.

Appendix I. shows that the length of the curricula of the Normal Colleges in Switzerland varies generally from two to four years. In twelve of the colleges it is the latter figure, and even in those with a shorter curriculum the tendency is to increase the number of sessions as the requirements of the teachers throughout the country are gradually raised.

Twenty-four of the colleges begin their session in spring (May or June), and the remaining eighteen in autumn (September or October). The holidays during the year generally amount to ten

* Reglement für die Aufnahmsprüfung zum Eintritt ins Staatsseminar von Hofwyl Kanton Bern vom 20 Februar, 1897.

or eleven weeks, viz., a fortnight in spring and autumn, four weeks in summer, and a week from Christmas to New Year.

Never are as many students taught in a class in Switzerland as we often find in the English and Scotch Training Colleges. Rarely in fact are more than 25 taught together, and if the number of students in a year exceed this they are divided in alphabetical order into two parallel classes.* For example, in the K nsnacht College, on the shores of Lake Zurich, the 149 students in the college last summer were taught in the following divisions, commencing with the youngest:—

	Men.	Women.
Class IA. - - - -	16	6
Class IB. - - - -	22	-
Class IIA. - - - -	15	5
Class IIB. - - - -	18	-
†Class III. - - - -	25	4
Class IVA. - - - -	16	4
Class IVB. - - - -	14	4

The subjects of instruction and the number of hours per week devoted to each vary somewhat in the different Swiss colleges, as will be seen from Appendix II. To give a better idea of the subjects and number of hours assigned to each, we may repeat here the summary of the time-table of the K nsnacht Training College†—the largest and certainly one of the best in Switzerland.

I.—OBLIGATORY SUBJECTS.

CLASS.	I.	II.	III.	IV.	TOTAL.
German - - - -	5	5	5	5	20
Pedagogy - - - -	—	2	2	3	7
Methodology - - - -	—	—	—	3	3
French - - - -	4	4	3	3	14
Mathematics - - - -	5	6	6	5	22
Natural Science - - - -	4	4	4	4	16
Laboratory Work - - - -	—	—	2	2	4
History - - - -	3	3	3	3	12
Geography - - - -	2	2	—	2	6
Singing - - - -	2	4	4	4	14
Violin - - - -	2	2	1	1	6
Drawing - - - -	3	3	2	2	10
Writing - - - -	1	—	—	—	1
Gymnastics - - - -	2	2	2	2	8
	33	37	34	39	143

* This is also the case in Training Colleges in Germany.

† I was informed that this class also would in the next session be divided into two sections.

‡ The detailed time-table of this college is given in Appendix V

II.—OPTIONAL SUBJECTS.

CLASS.	I.	II.	III.	IV.	TOTAL.
*Religious History - - -	—	—	2	2	4
English - - - -	2	2	2	—	6
Latin - - - -	2	2	2	—	6
†Piano - - - -	2	2	1	1	6
Drawing - - - -	—	—	1	1	2

The standard of instruction in each subject will be best seen from the syllabus (given below) of the final certificate examination for which the students are prepared.

Only a few general remarks need here be made on some of the subjects calling for mention.

Languages

Modern languages receive most attention in the colleges in the German-speaking parts of the country, but in all the Swiss colleges except four the study of one language other than the mother-tongue is compulsory. In the German-speaking cantons French is taught, and in French-speaking portions of the country towards the west and south-west, German is taught. English is an optional subject in eight colleges—two for men and six for women. In only two colleges (both in canton Zurich) is Latin taught, and even in those it is optional.

Science.

A perusal of Appendix II. shows that science instruction occupies an important place in all the Swiss Normal Colleges, from three to six hours a week being as a rule devoted to it by each class. The colleges are generally well equipped with laboratories and workshops, in which the students learn experimental methods and the handling of the most important chemical and physical apparatus. The splendid scientific collection and chemical and physical laboratories at Küssnacht would do credit even to a technical college.

As might be expected in a country where so many of the inhabitants live by the cultivation of the soil, the science of agriculture comes in for much attention in the Training Colleges, and in a number of them (*e.g.*, Hofwyl, Porrentruy, Muristalden, Richenbank, Zug, Hauterive, Rorschach, Chur, Wettingen, Kreuzlingen and Sion) the students have to supplement their theoretical studies by practical work in the fields.

Excursions
for the study
of Science
and Physical
Geography.

As illustrating the thoroughly rational method of teaching science and geography, it may be mentioned that in most of the colleges the students make every year an Alpine excursion of two or three days' duration in order to study in the field botany, zoology, geology, and physical geography. For example, last summer the female students of Delémont travelled to Basel, Lucern, Stanz (famous not only for its beautiful situation, but

* Practically every student takes this.

† I was informed that about three-fourths of the students take this in the first two years, and about one-half during the last two years.

also because of its association with the labours of Pestalozzi), over the Brünig Pass to Meiringen, thence to Interlaken, Grindelwald, Thun, Bern, and then home again.

The students of the first and second year at Künsnacht College go with some of their teachers for a three days' journey each year. The students in the third class are away for four days, and shortly before I visited the college last July the students of Class IV. had returned from a nine days' excursion in which they had gone as far as the Rhone Glacier. The Canton pays one-half of the expenses of the excursions and the students the other.

The musical instruction is always very prominent in the Swiss colleges. Singing and theory of music sometimes get as many as five hours a week in a class, and in all but eleven colleges instrumental instruction is obligatory. The commonest instrument is the violin, then the organ, piano, harmonium, and zither.

Gymnastics are taught in all except two small colleges, and this subject has generally two hours a week devoted to it by each class. Indeed, it is made compulsory by the Confederal Government, and the Director of Education for the Canton has to send a report of the annual inspection in this subject to the Military Department of Switzerland.

IV.—THE PROFESSIONAL TRAINING OF THE STUDENTS.

All the instruction in the colleges is given of course with special reference to the future vocation of the students and the needs and organisation of the popular schools. With the same objects in view, lessons are given in pedagogy and method. But competent observers of the Swiss colleges must we think come to the conclusion that the practical training the students get in teaching is perhaps the weakest point of the system, and hardly receives the amount of attention that its importance deserves.* Indeed, this part of the work is not done so thoroughly as in the colleges of our own country, and is not to be compared with the elaborate system in Germany.†

In all the colleges there is instruction given in general pedagogy, either preceded or followed by a study of the history of education, in some cases from the earliest times up to the

*This is the view taken also by C. Grob, editor of Swiss Educational Statistics in *Jahrbuch des Unterrichtswesens in der Schweiz*, 1890, p. 13, and homologated by so great an authority as Dr. A. Huber in *Schweizerische Schulstatistik*, Vol. viii., p. 1132. Mr. Grob says, "Die berufliche Ausrüstung der künftigen Volksschullehrer kommt aus verschiedenen Gründen an den meisten Lehrerseminarien nicht zu der wünschbaren Geltung," and then goes on to point out the chief defects.

†Described by the writer of this Report in a paper on *The Training of Primary and Secondary Teachers in Germany* which appeared in the *Educational News* in May and June, 1899.

Methodology present day, and in other colleges only the chief periods are studied, and an educational work read such as Pestalozzi's *Leonard and Gertrude*. Also the instruction in method either covers all the school subjects or only the chief ones, such as reading, arithmetic, and singing. In most of the colleges the pedagogy and method are taught by different teachers, and in some colleges each lecturer is master of method in his own subject. The invariable rule is to commence the exercises of the students in teaching in the last two years of their course, and what will appear a novel feature to most English educationists is that the Practising School generally comprises only the four lowest classes of the school annexed to the college, that is, consists of children from six to ten years of age. The four classes are taught in one room, and the Practising School is organised as a model of an undivided primary school, doubtless for the sake of the majority of the students, who will afterwards become teachers of small rural schools.

This part of the training of the future teacher is so important that I may give a sketch of how it is done in some of the colleges I visited.

Practical
Training at
Küsnacht.

At Küsnacht there is a special master of pedagogy and method,* who is also headmaster of the Practising School, in which he is aided by a certificated assistant. For the following account I am indebted to the kindness of the Director, Dr. Utzinger, who remarks, however, that the scheme is at present undergoing revision and may be somewhat altered: "Our students of Class II. receive instruction two hours a week in the history of education. In Class III. the same number of hours is devoted to the history of education and general pedagogic matters. In Class IV. two hours per week are devoted to psychology and pedagogy and four to method. In a part of these four hours the students receive connected instruction in general method and the method of individual school subjects, and in another part of the time the practical exercises in teaching take place. For the latter all the students have to hand in a written preparation of the lesson, and one of the students teaches the lesson to a class from the school, while the other students and the master criticise. At other hours the whole of Class IV. goes to the school to listen to model lessons given by the teacher, and these form the basis of subsequent discussion. The students of Class IV. also one after the other throughout the whole year go to the school, each for three days at a time,† to study the organisation of the Practising School, give lessons under the guidance of the teacher, and help to correct their faults by written exercises. Afterwards a written report of the visit has to be handed in." In addition to this each student has to teach a certain branch to a class for two or three

* There is much to be said for this co-ordination, as, on the one hand, the methodology can be made much more impressive by reference to the psychology and principles of education, and on the other the pedagogy will be more practical if evolved from, or tested by, the methodology.

† This is done by each student in the class three or four times throughout the year.

weeks, and towards the end of his course he is allowed at times to undertake the management of the whole Practising School, that is, four classes of about sixty pupils of ages ranging from six to ten.

The practical training of the students at Porrentruy in the Jura portion of canton Bern is thus described in the programme of the college: The Principal gives instruction in history of pedagogy, general pedagogy, school organisation, general methodology, and the method of linguistic teaching, with practical exercises. The methodology of the other subjects is taught by the different masters of the college. The students of the two higher classes are called upon in turn to give instruction in *l'école d'application*. Those of the last year are exercised little by little to manage the whole school. They keep a diary with an exact record of their work, and the observations they have been able to make. This is handed to the master in charge of the school, who adds his remarks on the capabilities of the student as a teacher and disciplinarian, and then, after consultation with the Principal and the teachers of the special subjects, he gives the necessary practical instructions to the student. Those explanations and criticisms evoked by the diary are made by the teacher during the hours assigned to methodology.

Practical
Training at
Porrentruy.

At Delémont College for Women, also in canton Bern, the course is a three years' one but as there are few students (28 last year) there is only one class, which is renewed every three years. In their last two years the students get practice in teaching in the school under the superintendence of the mistress of the school. They go two by two for half a week to the school, so that the turn of each student comes round again after about seven weeks. The Practising School contains about 50 pupils from six to nine years of age, and the students teach each of the three classes alternately.

Practical
Training at
Delémont.

V.—FEES AND EXPENSES OF BOARD.

It will be seen from Appendix IV. that seminarists do not as a rule pay fees, unless they do not belong to the canton, or are merely day students, or in cases in which the Training College is only part of a larger institution. Indeed, for all the public Training Colleges in Switzerland the total annual amount of fees is only about £1,400.

Switzerland is reputedly not a rich country, and parents desirous of educating their children to become teachers are generally too poor to be able unassisted to support them for several years at colleges remote from their homes. Hence for economic reasons the majority (25 out of 42) of the Training Colleges in Switzerland board the students in the college buildings.* The charges for board

Boarding
Houses for
the Students

* The experience of Küsnacht seems however to prove that a boarding house system is not necessary in Switzerland in order to obtain a full supply of students, and that the system is not much cheaper for the state. The college had a boarding house from ten years after it was established (1832) till 1875. In the latter year it was temporarily closed and it has not been found necessary to open it again. In lieu of the assistance obtained from a boarding house the bursaries have been proportionally raised to help the students to board with private families in the town, and as a result the expenses incurred by the state have hardly increased.

are always very low. At Chur in canton Grisons the students are boarded free. So, too, are the students of the Pedagogic Department of the Cantonal School at Solothurn, but in this case the total expenses for everything are calculated to be about 7.25 francs per week, and of this the students after they become teachers have to refund to the state three francs for each week.

In canton Bern* the charge for lodging, food, washing, fire, light, and medical attendance is 150 francs (£6) per annum for the poorest students; students who are in expectation of a fortune of

£40	pay an addition to this of	£1
£80	" " " "	£2
£120	" " " "	£3
and so on till £400 and upwards	" " " "	£10.

Also where the parents have a net income of

£40	there is an addition made of	£1
£80	" " " "	£2
£120	" " " "	£4
£160 and upwards	" " " "	£10.

The particulars as to fortune and income are ascertained from the registers of public taxation.

It may be mentioned that the average charge runs from £12 to £16 per annum, and lies nearer the former figure than the latter.

The Daily
Routine at a
Training
College with
a Boarding
House.

The daily life in any one of the Training Colleges with a boarding house is pretty much the same, and we may take the following account with which the Director of the Porrentruy College for men has kindly furnished me, as typical of the rest:

In summer the students rise at 5 a.m.	} All these take place an hour later in winter.
5.20-6.20 study	
6.20-6.45 sweep the class-rooms and dormitories	
6.45 breakfast	
7-11 (or 12 according to the day of the week and the class) lessons	}
12-1 dinner and recreation	
1-2 study	}
2-6 lessons with an interval of a quarter of an hour at four o'clock for tea	
6-7 study	}
7-8 supper and recreation	
8-9½ study, and then retire for the night.	

In the Training Colleges of Switzerland there are still distinct traces of the teaching of Pestalozzi, Fellenberg, and

* Règlement fixant la pension à payer par les élèves des écoles normales du canton de Berne, 4 octobre, 1876.

Vehrli* that manual labour ought to form a part of the instruction, and this not only because it is in itself an important part of education, but to train the students to suitable habits of thought and life for the laborious nature of their profession, and prevent them from becoming 'discontented afterwards with their lot amongst the simple peasantry with whom they may have to mingle. Hence agriculture is a common branch of study in the Swiss colleges, and in connection with it the students have generally to work for two hours in the fields or in the garden after dinner or afternoon lessons. Also in many of the boarding establishments the students assist in the domestic work. They lay the table and afterwards remove and wash the dishes, they keep the dormitories, lobbies, stairs and class-rooms clean;

* Sir J. Kay-Shuttleworth's description of his visit about 50 years ago to the college of which Vehrli was Director at Kreuzlingen, on Lake Constance, is so beautiful, that I am tempted to give an extract from it. "Vehrli welcomed us with frankness and simplicity, which at once won our confidence. He pointed to the viands, which were coarse, and said, 'I am a peasant's son. I wish to be no other than I am, the teacher of the sons of the peasantry. You are welcome to my meal; it is coarse and homely, but it is offered cordially.'

"We sat down with him. 'These potatoes,' he said, 'are our own. We won them from the earth, and therefore we need no dainties, for our appetite is gained by labour, and the fruit of our toil is always savoury.' This introduced the subject of industry. He told us all the pupils of the normal school laboured daily some hours in a garden of several acres attached to the house, and they performed all the domestic duty of the household. When we walked out with Vehrli we found them in the garden digging, and carrying on other garden operations with great assiduity. Others were sawing wood into logs, and chopping it into billets in the court-yard. Some brought in sacks of potatoes on their backs, or baskets of recently gathered vegetables, others laboured in the domestic duties of the household.

"After a while the bell rang, and immediately their out-door labours terminated, and they returned in an orderly manner with all their implements, and, washed, they reassembled in their respective class rooms. . . .

"As we returned from the garden with the pupils on the evening of the first day, we stood for a few minutes with Vehrli in the court-yard by the shore of the lake. The pupils had ascended into the class-rooms, and the evening being tranquil and warm, the windows were thrown up, and we shortly afterwards heard them sing in excellent harmony. As soon as this song had ceased we sent a message to request another; and thus, in succession, we called for song after song of Nageli, imagining that we were only directing them at their usual hour of instruction in vocal music. There was a great charm in this simple but excellent harmony. When we had listened nearly an hour, Vehrli invited us to ascend into the room where the pupils were assembled. We followed him, and on entering the apartment great was our surprise to discover the whole school, during the period we had listened, had been cheering with songs their evening employment of peeling potatoes, and cutting the stalks from the green vegetables and beans which they had gathered in the garden. As we stood there they renewed their choruses till prayers were announced. Supper had been previously taken. After prayers Vehrli, walking about the apartment, conversed with them familiarly on the occurrences of the day, mingling with his conversation such friendly admonition as sprang from the incidents, and then lifting his hands he recommended them to the protection of heaven, and dismissed them to rest."

they in some cases split the wood,* and look after the lamps and the heating. In this way they materially lessen the expenses of their board.

VI.—TRAINING COLLEGE BURSARIES.

It will be seen from Appendix IV., that bursaries are awarded in all the cantons except Fribourg and Solothurn. In the latter bursaries are not necessary, for, as has been said, the canton bears the whole expense of the board, medical attendance, &c., of the young teacher while he is preparing for his profession. And although in Fribourg no direct bursaries are paid, yet the canton does so indirectly as it reduces the board of deserving pupils from £14 to £10 per annum.

Bursaries in
Zurich.

The highest bursaries of all are paid in canton Zurich. Appendix IV., shows that at Küssnacht in 1895, 135 out of 198 students received bursaries amounting altogether to £1,484 (in 1896, £1,600). The amount granted to any student depends on his ability, diligence and conduct, but especially on his circumstances, and the bursaries are reconsidered every year. The maximum in Classes I. and II. is £16, and in III. and IV. £20, and the average bursary is £12. It will be thus seen that although no boarding-house is provided, the State does its duty by the students, as it grants the most needy and deserving of them £72 during the four years they are at college, whereas it is estimated that their expenses during the same period for board, clothes, books, &c., need not exceed £112.

Bursaries in
Bern.

The State Training Colleges of canton Bern grant to about three-fourths of their students bursaries up to £16 per annum, from which however is deducted the addition to the minimum charge for board (£6), which, as has been explained, the student has to pay according to his circumstances.

Obligation to
serve a cer-
tain length
of time in a
Public School
in the
Canton.

In return for the assistance thus given by the State for their education, the seminarists are bound, as a rule, to remain public school teachers in the canton for a certain number of years. The duration of this obligation varies from two years in canton Zurich to eight years in Valais. In Bern it is four years. Anyone failing to fulfil this condition has to refund a part of the sum he received as bursaries and assistance towards his keep, the fraction depending on the time that remains to be served. Of course the Council of Education of the canton can either partially or wholly forego this claim if it sees good reason.

VII.—THE EXAMINATION FOR THE PRIMARY TEACHER'S CERTIFICATE.

Arrange-
ments made
to relieve the

The regulations for the diploma examination are very different in the cantons throughout the country, but they nearly all agree

* At Porrentruy, for example, the students of the two lowest classes do this during midday recreation for about ten weeks in summer, to lay in the winter's stock of wood.

in one respect, namely, in devising some arrangement for relieving the student of the unnecessary strain of having to undergo examination in a bewildering variety of subjects at one time. In Zurich and Bern this is done by holding a part of the examination a year before the students leave the college. In Zurich the subjects of the first part of the examination will be seen from the italicised portions of the syllabus given below. In canton Bern the first examination (*Vorprüfung*) includes Religion, Psychology, German Grammar and Composition, Mathematics, Natural Science, History, Geography, Writing, while the concluding portion of the examination includes the instruction given during the year in any of the above subjects, and also Pedagogy, Methodology, French, Drawing, Music, Gymnastics and Practical Skill.

strain of the large number of Subjects of Examination.

In other cantons (*e.g.*, Lucern and St. Gallen) the leaving students have at the end of their course to take the theoretical part of the examination and come up for the practical part at a later period (one year Lucern, two years St. Gallen) in order to have the provisional certificate raised to a full certificate.

Lastly, in some of the cantons (*e.g.*, Fribourg and Geneva) the students do not receive a certificate on leaving the college, but after having passed a satisfactory examination they serve for a year under teachers recommended by the inspectors. In Fribourg they then come up for a second examination which is dispensed with in Geneva, where a satisfactory report of their practical skill is all that is necessary.

As a specimen of the examination requirements for a Primary Teacher's Certificate in Switzerland let us take those in canton Zurich.* The examination is conducted by a commission appointed yearly by the Council of Education. It is partly written, oral, and practical, and comprehends the following subjects and subdivisions of the same (the parts printed in italics are taken at the end of the third session, and the others at the end of the fourth).

The subjects of examination for Primary Teacher's Certificate in Zurich.

1. PEDAGOGY AND METHODOLOGY.—*a. History of Pedagogy.* *b. General Pedagogy.* *c. Methodology.* *d. Trial lesson in the school.*

2. GERMAN.—*a. Grammar, prosody, and composition.* *b. Reading and explanation.* *c. Knowledge of the literature.* *d. Essay.*

3. FRENCH.—*a. Grammar.* *b. Reading, translation, speaking.* *c. Knowledge of the literature.* *d. Essay.*

4. HISTORY.—*a. General History.* *b. Swiss History.*

5. RELIGIOUS HISTORY (optional).

6. MATHEMATICS.—*a. Algebra.* *b. Geometry.* *c. Arithmetic.* *d. Practical Mathematics (land surveying, &c.).*

The following are taken in the second part of the examination :—

a. Combinations ; binomial theorem ; complex numbers ; chief properties of the higher equations and of algebraic functions. *b. Spherical trigonometry.*

* Das Reglement über die Fähigkeitsprüfungen zur Patentirung zürcherischer Primarlehrer, vom 16 März 1880.

7. SCIENCE.—*a. Botany and Zoology. b. Chemistry. c. Mineralogy and Geology. d. Physics and Physiology.*

8. GEOGRAPHY.—*a. Special geography. b. Mathematical and physical geography.*

9. MUSIC.—*a. Theory and composition. b. Singing. c. Violin. d. Piano (optional).*

10. DRAWING.—*a. Freehand drawing from nature. b. Linear drawing. Drawings previously executed have to be shown.*

11. WRITING.—Writing on the blackboard, and specimens of writing previously executed have to be shown.

12. GYMNASICS.—*a. Knowledge of method. b. Practical skill.*

Each section of the above subjects has the same value. In deciding the result of the examinations the integers 1 to 5 are used, with the following significance:—1 = weak, 2 = unsatisfactory (these two marks are given to sections for which the students could not be granted a certificate), 3 = satisfactory, 4 = good, 5 = very good. At the close of the examination the average of all the numbers is taken, and the Examination Commission has to keep the following directions in mind.

(*a*) Candidates whose average over all does not exceed $2\frac{1}{2}$ fail, and are not granted another examination.

(*b*) Those whose average lies between $2\frac{1}{2}$ and 3 can take part of the examination over again in the following year. If in this examination their average does not reach 3, then they cannot be further employed as teachers.

(*c*) If the average of a candidate is between 3 and $3\frac{1}{2}$, but glaring weakness is shown in any of the more important subjects of the examination, then the commission recommends to the Education Council what parts of the examination should be taken over again at a later period.

(*d*) Candidates whose average is over $2\frac{1}{2}$ but under 3 receive a certificate marked "Provisionally Qualified," and the Council of Education can temporarily assign him to a place. If he does not pass another examination within four years his certificate is cancelled.

The Examination Commission reports the results to the Council of Education, which then issues to the successful candidates two certificates—1, the certificate of qualification; 2, the certificate containing the whole of the marks for the different parts of the examination. Both of these combined form the Teacher's Certificate.

In canton Bern the standard of examination is about the same as the above. In this canton 69 male and 120 female candidates presented themselves in the year 1898-99, and of these there were successful 64 and 117 respectively.

All the cantons allow those who have not studied in a Normal Seminary to try the certificate examination qualifying to teach in an elementary school, provided the candidate is 19 years of

Outsiders
may try the
examination
for the

age and of good moral character. But very few outsiders present themselves, and, as one of the chief educational authorities in Zurich says, they form "a vanishingly small fraction" of the whole.*

Elementary School-teacher's Certificate.

In the year 1896-97 the total number of male students in training was 1,384 (a diminution of 12 from the previous year), and of female students 1,149 (an increase† of 94), and the numbers successful in the certificate examination were 374 and 286 respectively. The annual expense of training teachers in Switzerland is about £56,000,‡ so that the cost of each student is about £22 per annum.§ The State contributes about three-fourths of this, the other fourth being derived to a small extent from fees (about £1,400 per annum), but chiefly from the income of the boarding-houses (about £9,000 a year) and voluntary contributions (about £2,800 a year) from societies to the funds of the private Training Colleges.

The number of Students in Training Colleges and the annual cost of their training.

* Dr. A. Huber in *Schweizerische Schulstatistik*, vol. viii., p. 441, writes: "The great majority of primary teachers in Switzerland have received their education in Training Colleges; only a vanishingly small fraction has come from other Secondary Schools, and only a few have received a University education."

† In Switzerland, as in this country, the percentage of male teachers in the elementary schools is slowly but steadily decreasing, as will be seen from the following:—

Year.	Total Number of Elementary Teachers.	Men.	Per-centage.	Women.	Per-centage.
1887-88 - -	9,031	6,127	67·8	2,904	32·2
1888-89 - -	9,151	6,140	67·5	2,971	32·5
1889-90 - -	9,239	6,166	67·0	3,043	33·0
1890-91 - -	9,330	6,227	66·7	3,105	33·3
1891-92 - -	9,418	6,266	66·5	3,162	33·5
1892-93 - -	9,480	6,291	66·4	3,187	33·6
1893-94 - -	9,609	6,348	66·1	3,261	33·9
1894-95 - -	9,550	6,292	65·9	3,258	34·1
1895-96 - -	9,664	6,359	66·1	3,305	33·9
1896-97 - -	9,765	6,385	65·4	3,370	34·6

Indeed Article 24 of the latest School Law for Bern (1894), says expressly "the elementary classes will be entrusted as a rule to women."

‡ About one-half of this is for salaries, about one-fourth for the support of the students in the boarding-houses, and the bursaries awarded amount to more than £8,000 per annum.

§ See the financial part of Appendix IV., which, however, does not give the particulars regarding the private Training Colleges. It will also be observed that when students are trained in a pedagogic department of a larger institution the cost of their training is not stated, as it is mixed up with the general expenditure of the school.

VIII.—EXAMINATION FOR THE HIGHER PRIMARY SCHOOL TEACHER'S CERTIFICATE (SEKUNDARSCHULLEHRER).

With one exception there are no Training Colleges in Switzerland to train candidates for teaching in Higher Primary Schools.* The exception is the case of canton St. Gallen, in which the Gymnasium has a course of a year and a half's duration for preparing teachers for Higher Modern Schools (*Realschulen*).

In all except eight or nine cantons, however, a teacher must fulfil certain conditions, and pass an examination in order to obtain a diploma qualifying to teach in a higher primary school. The conditions and scope of the examination are somewhat different in the various cantons, and, as in the preceding chapter, we shall take the regulations of canton Zurich as representative of the others.

Regulations
in canton
Zurich.

In canton Zurich† candidates for examination must have (a) the full qualification of an elementary teacher, (b) served at least one year in a school of the primary grade, (c) studied for two years at a University the subjects selected for examination, but for a modern language one of the years may have been spent in the respective country.

The examination fee is 10 francs.

The Council of Education appoints the Examination Commission, which is divided into sections of at least two members for each of the subjects, which are as follows:—

1. PEDAGOGY.—a. General Pedagogy and Psychology. b. History of Pedagogy.

2. METHODOLOGY.—a. Method of instruction in higher primary school subjects. b. Trial lesson.

3. GERMAN.—a. The chief facts of the History of the Grammar. b. History of the Literature: thorough knowledge of an important poet or of a group of poets (1) of the Middle High-German Period, (2) of the New High-German Period. c. An essay.

4. FRENCH.—a. Grammar. b. History of the Literature, and a very thorough knowledge of a few important works. c. An essay, and a translation from German into French.

5. ENGLISH (as for 4).

6. ITALIAN (as for 4).

7. LATIN.—a. A translation and grammatical explanation of a passage from a prose writer such as Cæsar, Livy, Cicero. b. Reading and translation from a poet such as Ovid, Virgil, Horace. c. Written translation from German into Latin.

8. HISTORY.—a. General history and history of culture up to the present time. b. Swiss history and a knowledge of the Swiss constitution.

9. MATHEMATICS.—a. Algebraic analysis, and the differential and integral calculus (the latter optional). b. Analytical geometry. c. Descriptive geometry.

10. PHYSICS.—a. Mechanics (including acoustics) and heat. b. Optics and electricity. c. Practical physics.

* See footnote p. 181 regarding *Sekundarschulen*.

† Das Reglement über die Fähigkeitsprüfungen zur Patentirung zürcherischer sekundarlehrer, vom 24 Mai, 1890.

11. CHEMISTRY.—*a.* Inorganic chemistry. *b.* Organic chemistry. *c.* Practical chemistry.
12. GEOGRAPHY.—*a.* Mathematical and physical geography. *b.* A knowledge of the nations and peoples.
13. MINERALOGY AND GEOLOGY.—*a.* Mineralogy. *b.* Geology.
14. BOTANY.—*a.* General botany, and microscopic exercises. *b.* Special botany.
15. ZOOLOGY.—*a.* General zoology, and practical zoology. *b.* Special zoology.
16. HUMAN ANATOMY AND PHYSIOLOGY.—*a.* Anatomy. *b.* Physiology. *c.* Hygiene.
17. DRAWING.—*a.* Freehand drawing. *b.* Technical drawing and plan-drawing.
18. GYMNASICS.—*a.* Theory of gymnastics for higher primary schools. *b.* Practical skill.

The examination qualifying to teach in a higher primary school embraces the following:—

1. Pedagogy, Methodology, German, French.
2. Also one of the following sections:—(*a.*) English or Italian or Latin; (*b.*) General History and Swiss History; (*c.*) Physical Geography, and a knowledge of the nations and races of mankind; (*d.*) Mathematics and Mathematical Geography; (*e.*) Physics and Physical Geography; (*f.*) Chemistry; (*g.*) Mineralogy and Geology; (*h.*) Botany; (*i.*) Zoology. All candidates must give proof of regular attendance at the university lectures in the subjects chosen, and of having diligently taken part in the exercises in the same.

3. In so far as the candidate did not reach the mark 5 (very good) in Drawing, Music, and Gymnastics in the examination for primary teachers, he has to give evidence of further preparation in them.

The candidate has in the examination room (*a.*) to write an essay in German; (*b.*) an essay in French; (*c.*) to undergo an examination in the subject selected from *a* to *i* in the preceding paragraph. Further, every candidate has to hand in a thesis chosen by himself in connection with his principal subject.

In adjudicating on the results in each subject the integers 1 to 5 are employed with the same meaning attached to them as explained on p. 16. The marks awarded by the sections of the commission are afterwards submitted to the whole commission, and those candidates are failed whose average mark in more than one subject does not reach 3. They are allowed to take the examination again at the earliest a year afterwards, and the Council of Education can on this occasion grant exemption from the subjects in which the candidate previously gained at least the average 4 (good). Only under exceptional circumstances can a third examination be granted. The examination marks and the proposals with regard to them by the whole commission are transmitted to the Education Council, with whom rests the final decision as to the result. The higher primary teacher's certificate consists of—1. The examination certificate with the marks obtained in the different subjects. 2. The list of lectures

and practical courses which the candidate attended. 3. The title of the thesis chosen for treatment by the candidate.

The regulations for the Bernese Higher Primary Teacher's Certificate* are very similar to the above. In this canton fifty-three tried the examination in the half-year from November 1898 to April 1899, and forty-one were successful.

IX.—QUALIFICATIONS FOR SECONDARY SCHOOL TEACHERS.

There are for secondary school teachers in Switzerland no fixed examinations similar to the above. Nor are there colleges for training such teachers, but some of the Universities have pedagogic departments, in connection with which arrangements are made for obtaining practice in teaching. For example, by a Law of 11th May, 1875, classes for training secondary teachers at the University of Bern are subsidised to the extent of £1,000 per annum.

When a vacancy occurs in a secondary school (*Mittelschule*) in Switzerland the Committee of Supervision of the School usually advertises the place, and the candidates have to teach a trial lesson and undergo an examination, unless the Committee thinks that it has otherwise sufficient proof of their skill and ability.

X.—CONTINUATION AND EXTENSION COURSES FOR TEACHERS.

After a student leaves an elementary training college in Switzerland every inducement is held out to him to continue his studies, and it is impressed upon him that the only way to prosper in his calling is by incessantly striving to improve his scientific and professional attainments. Hence there are in most of the cantons officially organised Repetition and Extension Courses for teachers. In one canton (*Valais*) there is a permanent arrangement made for such courses, but in the other cantons they either take place at regular intervals, or from time to time according to requirements.

At these courses instruction is given in particular subjects, such as Method, Natural Science, Manual Work, Singing, Drawing, Gymnastics. In some of the cantons attendance at them is compulsory, while in others it is simply recommended. As a rule the State bears a part or the whole of the expenses for board of those taking part in the courses. For example, in canton Bern it is enacted† that at each Training College there will be held every second year, as a rule, a repetition or extension course for certificated masters and mistresses, at which attendance will either be compulsory or be granted by application to the Director of Education. The instruction is gratis, and so is a part or the whole of the expenses of lodging and board. The

* *Reglement für die Patentprüfungen von Sekundarlehrern des Kantons Bern vom 16 Oktober, 1897.*

† § 12 *Loi sur les écoles normales du canton de Berne, 11 Mai, 1875.*

maximum length of a course is six weeks in the German districts, and three months in the French ones.

In canton Zurich continuation courses are not arranged by the State, but these and courses of lectures are held in connection with the school chapters. Every year the Council of Education grants 300 francs to be awarded for Prize Essays by elementary teachers holding appointments in the public schools. The prizes are sums of 20, 40, or 60 francs, but for a particularly brilliant performance 180 francs may be awarded.

XI.—THE APPOINTMENT AND DISMISSAL OF TEACHERS.

In all the cantons but three the appointment of elementary teachers is in the hands of the local school authorities—either the committee of the particular school or of the commune. The exceptions are Baselstadt, in which the Council of Education makes the appointment, and Geneva and Fribourg, in which it is made by the Council of State—in the latter case, however, with the advice of the communal council and school committee. In most cantons the appointment is for a certain number of years, varying from one to eight years, at the end of which time it may be renewed or cancelled.

The exact conditions of the appointment and the manner of making it vary much throughout the cantons.

In canton Bern no vacancy in an elementary school can be filled up (except it be a case of promotion in the same school) without being first advertised in the Official Leaflet (*Amtliches Schulblatt*, a small bi-monthly of about 12 pages) with a statement of the duties and the emoluments attached.* The terms of this statement are binding both on the school authorities and on the teacher appointed. Candidates have to submit to the school commission their diploma, their testimonials, and a short sketch of their career. If the commission thinks it necessary the candidates can be asked to give trial lessons before an expert appointed by the Director of Education. The successful candidate enters on his duties at the beginning of the school half-year following the appointment, *i.e.*, either 1st May or 1st November. Teachers are appointed for a term of six years, and three months before the end of this period the school committee determines whether the appointment will be renewed for a similar period, or whether the place will be again open to competition. The teacher must remain in the situation for at least one year, and if he wishes to retire, must give notice to the committee two months before the 1st May or 1st November. Anyone who breaks this regulation can, by the decree of the Council of State, be deprived either partly or wholly of the State contribution to the salary.

Elementary
Teachers in
canton Bern.

* Loi sur l'Instruction Primaire du Canton de Berne, 6 Mai, 1894, § 31 *et seq.*

Higher
Primary
Teachers in
canton Bern

Vacancies in the staff of a higher primary school* are advertised, and candidates who are not certificated have as a rule to undergo an examination, while from others a trial lesson only is required. The committee of the school sends the name of its nominee to the Council of State, with whom rests the final appointment. The teacher may be required to serve a certain time on trial.

Secondary
Teachers in
canton Bern.

Vacancies in cantonal, *i.e.*, secondary schools† are filled up after a public examination (since there is no certificate for secondary teachers), which may, however, be dispensed with in the case of those of proved ability. Before making the appointment the inspector of higher grade schools has to be consulted, and the consent of the Council of State obtained. Masters are as a rule appointed for ten years, and anyone wishing to resign during that time must give notice to the school committee two months before the end of the current half-year.

Primary
Teachers in
canton
Zurich.

In canton Zurich the procedure is somewhat different. According to the Law of 1859,‡ when a vacancy occurs in a public elementary school in canton Zurich the Director of Education sends at once a temporary teacher who must be certificated. Then the communal school committee (*Gemeindschulpflege*) decides within four weeks whether this temporary arrangement will continue, or whether a definite appointment will be made, and, in the latter case, whether it shall be made by nomination or by advertisement. In any case the temporary appointment cannot last longer than two years.

Every teacher is eligible for definite appointment who is fully certificated and has taught for two years in the canton. But because of the superabundance of teachers and the difficulty of getting situations about twenty years ago, this regulation was modified so that only a half-year's school experience during the two years succeeding the issue of the teacher's diploma now qualifies for a definite appointment. The appointment is for six years, and at the end of that time the school committee meets and votes by ballot for or against the retention of the teacher for another term of like length.

Higher
Primary
Teachers in
canton Bern.

By the Law of 1859 the committee of a higher primary school fills up a vacancy after having thrown the same open to competition by advertisement. The duration of the appointment is six years.

Secondary
Teachers in
canton
Zurich.

Vacancies in secondary schools are advertised in the official press, and the election made by the commission having oversight of the school (Section 290 of Law of 1859). Since there are no diplomas for secondary teachers, in order to make sure of the fitness of the candidates they can be

*Loi sur les écoles secondaires du canton de Berne, 26 Juin, 1856, § 16, *et seq.*

†Loi concernant la suppression de l'école cantonale à Berne, ainsi que quelques modifications apportées à la législation scolaire par suite de cette suppression, 27 Mai, 1877, § 3.

‡Gesetz über das gesammte Unterrichtswesen des Kantons Zurich vom 23 Dezember, 1859, § 277.

asked to pass an examination and teach a trial lesson. The appointment is at first for ten years, after which the teacher is definitely appointed and holds the title of professor.

The school-laws of the different cantons make careful provision for full and fair consideration before a teacher is dismissed, and as a rule this extreme step cannot be taken without the consent of the Council of Education of the canton. In Bern, for example, all complaints by parents or others are lodged with the school committee, and if the latter has any complaints it submits them to the school inspector. If the fault is such as to necessitate the suspension or recall of the teacher, it is at once notified to the Director of Public Instruction accompanied by the opinion of the inspector. Differences between the teacher and the community or the school committee, which are such as to prevent the full efficacy of his work, and cannot be otherwise removed, form a ground for the dismissal of the teacher, and this carries with it expulsion from the teaching profession, whereas recall entails only removal from the position then occupied. The Director of Public Instruction decides also on complaints made by a teacher against the school committee.

Suspension
or dismissal
of Teachers

XII.—SALARIES.

A student on leaving a Training College has no difficulty in finding employment, as it is not to the interest of a canton to expend money in training more teachers than are required for its schools, and competition cannot lower the salaries, as the minimum is in nearly every case fixed by the school-law of the canton.*

The average commencing salary of a Swiss elementary teacher may be set down as 1,000 francs (£40), the highest being paid in some of the larger towns (owing to the increased expenses of living), and in remote mountain districts (to prevent too frequent changes of teachers). The above may seem to us a very modest sum, but if we keep in mind the greater purchasing value it represents in Switzerland than in this country, that in addition to it the teacher is provided with a house, garden, and firewood, or an equivalent in money, that the salary receives regular increments proportional to the length of service, that the teacher has generally the right of appeal to the Education Council should he be dismissed as he thinks unjustly, that after a certain age he is entitled to a pension, that in the case of his death his widow and children receive an annual allowance, we must conclude that the lines of the elementary school teacher in Switzerland are not cast in unpleasant places.

Each canton has its own regulations for teachers' salaries, but a pretty accurate notion of the whole will be obtained from a

* In only five cantons is this not the case, namely, Appenzell-A-Rh., Nidwalden, Schwyz, Uri, Zug. Schwyz is also unlike the other cantons in that the State does not directly contribute a share of the teachers' salaries, which are wholly paid by the communes, but it does so indirectly, as it puts the whole of the profits derived from the State monopoly of alcohol to the credit of the school funds of the communes.

study of the methods of paying the different grades of teachers in two representative cases.

Primary and
Higher
Primary
Teachers in
canton
Zurich.

In canton Zurich* the minimum salary of an elementary schoolmaster is £48 (for higher primary teachers £72) a year, together with a house, 256 cubic feet of firewood, and half a *Juchart*† of arable land.

Annual
increments.

The salary of a primary or higher primary teacher remains fixed for six years, and thereafter the State, that is the canton, grants the following increments of the annual salary according to the length of service in a public school in the canton:—

For 6 to 10 years' service	-	-	£4
For 11 to 15 " "	-	-	£8
For 16 to 20 " "	-	-	£12
For more than 20 " "	-	-	£16

In special cases the State grants increases up to £12 per annum to the salaries of masters and mistresses in remote schools if the teacher undertakes to remain at the place for at least three years. The most of the communes also raise the salaries (and now and then the State pensions) of the teachers in order to retain their services in spite of the competition of other communes.

The part of
the salary
defrayed by
the State.

In all the cantons the State-aid to education takes mainly the form of a payment to the local school-authorities of a share of the teachers' salaries, recognising that this is one of the best means of keeping the school efficient.‡

In canton Zurich the contributions of the State towards the salary of the teacher are as follows:—

1. It pays the above increases of annual salary for length of service, and the special grant to teachers in remote districts.
2. It pays all except £24 of the minimum salary of £48 for primary and £72 for higher primary teachers.
3. It contributes from £4 to £23 10s. (100 francs to 590 francs) towards the remaining £24 of the minimum salary according to a scale depending on the relation of the school rates to the average total assessment of the commune for the last five years.§
4. It contributes, according to the circumstances just mentioned, from 10 to 15 per cent. of any increase of salary granted by the commune, but this only up to a total salary of £60 for primary and £80 for higher primary teachers, exclusive of the increase for length of service.

* Gesetz betreffend die Besoldungen der Volksschullehrer des Kantons Zürich vom 22 Dezember 1872.

† A *Juchart* is as much land as a pair of oxen could plough in a day—say about two acres.

‡ Although the State thus contributes a share of the teachers' salaries, it takes no part in appointing them. That is, as we have seen in the preceding chapter, left in almost every case to the School Committees. For valuable remarks on the relative advantages of the Swiss and English forms of State-aid to public schools see Mr. R. L. Morant's report on 'The Organisation of Education in Switzerland, *Special Reports*, vol. iii, p. 38 et seq.

§ On this basis the communes of the canton are divided into ten classes as explained at pp. 41, 49, and 50 of Mr. Morant's Report. Class I. gets under this head 100 francs, Class II. 150 francs, Class III. 200 francs, and so on up to Class X. from 550 to 590 francs.

The commune pays the remainder of the money-salary, and in addition to this it has to supply the teacher with firewood, and a house* and garden as near as possible to the school. If the circumstances of the commune require it, these may be partially or wholly replaced by a money compensation, the amount of which is fixed by the district school committee (*Bezirks-schulpflege*). The part of the salary defrayed by the Commune.

By a decree that came into force on the 1st January, 1897, it was enacted that teachers in secondary schools in canton Zurich should receive a fixed salary of from £160 to £192 a year, with additions for length of service of exactly double what we have stated for teachers of the primary grade. In addition to these sums the teachers in secondary schools divide one-half of the school fees in proportion to their number of hours and number of scholars. To the fully occupied teacher, that is one teaching from 20 to 25 hours a week, this amounts to from £8 to £12 a year. Secondary Teachers in canton Zurich.

In canton Bern the salary arrangements are somewhat different. By the Primary Instruction Act of 6th May, 1894, the commune has to give to each primary teacher at least £18 a year, payable quarterly, and a suitable house and garden and 9 cubic yards of firewood and 1,800 square metres of arable land. The payments in kind can be replaced partly or wholly by a money equivalent. Primary Teachers in canton Bern

The State pays the following contributions—to non-certificated teachers £4 per annum, and to certificated teachers:—

Years of Service.†	Master.	Mistress.
1-5 inclusive - -	£ 20	£ 14
6-10 " - -	26	17
More than 10 - -	32	20

* By a law which has been in force since 1st January, 1891, the State requires that the teacher's house shall have a spacious sitting-room with an adjoining room (*mit Nebenzimmer*), a kitchen, three other rooms wainscoted or papered whereof at least one shall have a fireplace, a pantry, a cellar, a store for wood, a separate w. c. In the case of the letting of the house on the part of the teacher or the committee of the school, the lease must be submitted to the district school committee for ratification.

† The numbers of teachers in the different classes in canton Bern at 31st March, 1899, were:—

Years of Service.	Masters.	Mistresses.
1 to 5 - - - - -	227	222
6 to 10 - - - - -	178	171
More than 10 - - - -	828	537
Total - - - - -	1,233	930

Higher
Primary
Teachers in
canton Bern.

The State also pays extra grants to necessitous communes to help them to get and retain good teachers.

The salary paid to a teacher in a higher primary school* depends on the circumstances of the locality, and on the qualifications of the teacher, &c.; but for no higher primary teacher can the salary be less than 30 francs (£1 4s.) a year for each hour's teaching per week, and for the principal teachers in a higher primary school with literary studies (progymnasien and colleges) it cannot be less than double the above amount. The State generally pays half of the salary of the teachers, in return for the right of holding at least two free places to be awarded by preference to those preparing to enter a Training College.

Secondary
Teachers in
canton Bern.

There is no fixed scale of salaries for secondary teachers applicable to the whole canton. Each establishment has its own rate. For example, the salaries in the Mittelschulen in the town of Bern were fixed by a decree of 16th October, 1895, as follows:—

I. Fixed Salary:—

- (a.) A mistress (22 to 26 hours a week), in the Girls' Higher Primary School is to receive £88 per annum.
- (b.) An ordinary master (25 to 31 hours a week), in the above school or in the Boys' Higher Primary School or in the Progymnasium is paid £144 a year.
- (c.) A master (22 to 28 hours a week), in the secondary department of the Girls' Higher Primary School or in the Gymnasium receives £160 a year.

II. Increase of annual salary for continuous service, after definite appointment, in a secondary school in the town:—

—				Masters.	Mistresses.
				£	£
After	4	years	- - -	12	8
"	8	"	- - -	24	16
"	12	"	- - -	36	24

Average
salaries in
the different
cantons.

The following were the average salaries of teachers in the various cantons in 1883, and, although in some cases the salaries have been increased since then, it will give a fair

* Loi sur les écoles secondaires du canton de Berne, 26 juin 1856.

idea of the averages at the present day, as the scales of payment are mostly fixed by law:—

AVERAGE SALARIES OF TEACHERS IN SWITZERLAND IN 1883*.

Canton.	Masters.	Mistresses.	Teachers of both sexes.
	£	£	£
Appenzell A. Rh. - - -	73	74	73
Appenzell I. Rh. - - -	39	26	35
Aargau - - - - -	49	44	48
Basel Land - - - - -	58	58	58
Basel Stadt - - - - -	129	61	111
Bern - - - - -	55	41	50
Fribourg - - - - -	41	28	36
Geneva - - - - -	88	49	66
Glarus - - - - -	64	—	64
Grisons - - - - -	28	19	27
Lucern - - - - -	51	49	51
Neuchâtel - - - - -	78	42	54
Nidwalden - - - - -	26	15	18
Obwalden - - - - -	36	20	24
Schaffhausen - - - - -	67	47	65
Schwyz - - - - -	41	22	30
Solothurn - - - - -	52	47	51
St. Gallen - - - - -	63	48	62
Tessin (Ticino) - - - - -	27	20	23
Thurgau - - - - -	62	50	62
Uri - - - - -	21	14	18
Valais - - - - -	17	14	15
Vaud - - - - -	70	47	61
Zug - - - - -	45	17	31
Zurich - - - - -	89	72	88
Switzerland - - -	57	36	51

In the greater number of cantons the salary does not at once cease when a schoolmaster or schoolmistress dies, but continues to be paid in full to the teacher's heirs for a longer or shorter period after the death of the Teacher.

* From *Jahrbuch des Unterrichtswesens in der Schweiz*, 1892, p. 94. The averages above are stated in the nearest number of pounds in order to avoid decimals, and the above figures do not, of course, include the payments in kind. In a Report by Messrs. M. E. Sadler and J. W. Edwards on Public Elementary Education in England and Wales, 1870-1895 (*Special Reports on Educational Subjects*, vol. i.) the following average salaries of certificated teachers in England and Wales are given:—

YEAR.	Masters.			Mistresses.		
	Principal Teachers.	Assistant Teachers.	All Teachers.	Principal Teachers.	Assistant Teachers.	All Teachers.
	£	£	£	£	£	£
1885	132	90	121	79	63	74
1890	134	90	120	83	66	76
1895	138	98	122	88	73	81

shorter period. The regulations for this humane consideration vary throughout the cantons. In Zurich the salary and pension are paid for a period of six months after death, and are payable firstly to widows, secondly to children, thirdly to near relatives who have lived in the same household with the deceased or have been supported by him. In cantons Aargau, Baselstadt, Bern, and Lucern the salary and pension run on for three months. In canton Schaffhausen the salary continues to be paid for the current quarter and the next, and in Thurgau it is paid till the end of the month in which death took place and for three months afterwards, with a deduction, however, of the salary of any substitute. And so on.

XIII.—RETIRING PENSIONS FOR TEACHERS.

One of the chief advantages to be derived from the study of educational arrangements in Switzerland is that the five and twenty cantons, differing widely as they do in their historical development, their geographical, economic, religious, and political conditions, have viewed educational questions from every possible point of view, and offer us well-nigh every variety of solution. This has been the case with the difficult question of teachers' retiring allowances. But despite differences of detail we may recognise two groups of solutions:—

1. State pensions and grants, *e.g.*, in cantons Aargau, Baselstadt, Bern, Glarus, Schaffhausen, Vaud, and Zurich.
2. Teachers' Funds, obligatory in some cantons and in others optional (See Appendix VII.). In some cantons the funds are subsidised by the State and in others not. The funds also are applied in different ways; in some cantons (*e.g.*, Appenzell A. Rh., Geneva, Neuchâtel, St. Gallen), they are for providing retiring pensions in the case of old age or failure of health; in others (*e.g.*, Baselstadt and Zurich) their object is to furnish pensions to widows and orphans; and in a third series (*e.g.*, Lucern, Solothurn, &c.) the objects of both of the above groups are combined.

In only four cantons (Nidwalden, Obwalden, Uri, and Valais) in democratic Switzerland does the State make no grant for retiring pensions to teachers nor allowances to those dependent on them. But even in these a teacher on retiring frequently gets from the people a presentation of a larger or smaller sum as an expression of their gratitude for faithful services.

As examples of State administration of retiring allowances, we may study the arrangements in the two most important of the seven cantons enumerated.

In canton Zurich* a primary, higher primary, and secondary

* In this canton pensions to elementary teachers were made possible as early as 1832 by § 83c of the *Gesetz über die Organisation des Volksschulwesens vom 28 September 1832*. The pension laws at present in force are §§ 313, 314 of the *Gesetz über das gesammte Unterrichtswesen des Kantons Zürich vom 23 Dezember 1859*, and the *Verordnung betreffend Ruhegehälter vom 3 September 1891*. †

teacher who has served at least 30 years can, with the permission of the Council of Education, retire on a pension from the State amounting to at least the half of his legal salary at the time, and the exact pension awarded is fixed by the Council according to the special circumstances of the case, such as the teacher's means, his length of service, and the duties he has performed. The Council is also empowered to put a teacher on the retired list if his age or health require it. The teacher can in this case appeal to the Council of State. The amount of the pension is regulated as before. If teachers, through any other circumstances for which they are not responsible, are unable to continue their duties, they can be superannuated either at their own request, or by a decision of the Council of Education, with power of appeal to the Council of State. In the latter case the pension is at least half their legal fixed salary, and in the former case as a rule a lump sum is paid.

Pensions to
Primary,
Higher
Primary, and
Secondary
Teachers in
canton
Zurich.

With every request for a pension there has to be sent a family certificate, an official statement of pecuniary affairs, and, if the petitioner be less than 50 years of age, an official medical certificate as to his or her state of health.

All decisions as to pensions are subject to the approval of the Council of State, which every three years orders a general revision of the pensions, and the right to the continued enjoyment of a pension can at any time be re-examined and the pension either wholly or partly discontinued if it appears that the grounds on which it was granted no longer exist. If anyone holding a pension should through accepting another salaried post, or in any other way, obtain an income which, along with his pension, exceeds the previous salary, then the pension is to be proportionally reduced. If one has had to be superannuated because of ill-health he can enter the service again if his health improves.

The pensions of primary teachers throughout the canton vary from £4 to £40, of higher primary teachers from £20 to £56, and of secondary teachers from £40 to £120. In the towns of Zurich and Winterthur these sums from the State are considerably supplemented by contributions from the towns, so that the primary teachers on retiring get up to from £76 to £100 and higher primary teachers up to from £88 to £100.

In canton Zurich on 1st November 1893, 77 former elementary teachers and 13 higher primary and 7 secondary teachers were in receipt of pensions. The following particulars regarding them may be given :—

Former Primary and Higher Primary Teachers.

10 had served 30 years or less	3 were between 41 & 50 years of age
20 " " from 31 to 35 years	11 " " 51 & 60 "
16 " " 36 to 40 "	38 " " 61 & 70 "
22 " " 41 to 45 "	36 " " 71 & 80 "
19 " " 46 to 50 "	2 " " 81 & 90 "
3 " " more than 50 "	

Former Secondary Teachers.

3 had served from 30 to 40 years	2 were between 61 & 70 years of age
2 " " " 41 to 50 "	3 " " 71 & 80 "
2 " " " 51 to 55 "	2 " " 81 & 90 "

The following analysis will give an idea of the individual pensions:—

Former Primary Teachers.

Amount of Pension in Francs.	No. of Pensions.
100 to 200	1
201 to 300	—
301 to 400	1
401 to 500	5
501 to 600	2
601 to 700	4
701 to 800	14
801 to 900	33
901 to 1,000	17

Former Higher Primary Teachers.

Amount of Pension in Francs.	No. of Pensions.
1,001 to 1,100	1
1,101 to 1,200	4
1,201 to 1,300	5
1,301 to 1,400	3

Former Secondary Teachers.

Amount of Pension in Francs.	No. of Pensions.
1,100 to 2,000	2
2,001 to 3,000	3
3,001 to 3,500	2

pensions to
primary
teachers in
canton Bern.

In canton Bern a law was passed on 5th December, 1837, which included provision for pensioning elementary teachers. This has several times been revised, and the regulations at present in force are sections 49 and 50 of the *Loi sur l'Instruction primaire du canton de Berne*, 6 Mai 1894. By this law it was enacted that certificated elementary teachers who, through enfeeblement of their physical or intellectual forces, are no longer able to perform their work with efficiency can, after 30 years' service

(20 years for mistresses), or even earlier in case of necessity, be pensioned by the State at the rate of from £11 4s. to £16 a year according to length of service.* On the death of the holder, his widow and children continue to draw the pension during the current and the succeeding quarter of a year.

In the town of Bern the above pensions were considerably increased by a decree of 3rd December, 1893. By it, male teachers who have served 30 years (and female teachers 25 years), can be granted for life a pension of £32 if they do not accept another salaried position.

Augmented Pensions to Primary Teachers in the town of Bern.

In canton Bern, special arrangements were made by the law of 27th May, 1877, for the superannuation of teachers in higher primary and secondary schools. It is decreed that masters or mistresses who have served for at least 20 years in the public schools of the canton, of which 10 years have been served in a secondary school, can, when obliged to resign on account of age, or of other causes beyond their control, claim a pension of not more than half their normal salary. In cases of necessity, masters or mistresses who have distinguished themselves by their services in the cause of education can, exceptionally, even before the above periods obtain a pension, which ought not, however, to exceed a third of their salary. The Council of State decides whether or not a pension can be granted, and, if so, its amount, according to the special circumstances of the case.

Pensions to Higher Primary and Secondary Teachers in canton Bern.

The following are the particulars regarding the pensions in force in canton Bern at the beginning of 1893:—

Primary Teachers.		Higher Primary and Secondary Teachers.	
Francs.	Francs.		Francs.
3 at 200 =	600	1 each at 500, 600,	
40 " 240 =	9,600	1,000, 1,500, 1,600,	
9 " 260 =	2,340	1,800, 1,900, 3,000	= 11,900
10 " 280 =	2,800	francs - - - -	
10 " 300 =	3,000	3 at 800 francs =	2,400
13 " 320 =	4,160	3 " 900 " =	2,700
11 " 340 =	3,740	5 " 1,200 " =	6,000
76 " 360 =	27,360		
<u>172 pensions</u>	<u>53,600</u>	<u>19 pensions</u>	<u>23,000</u>

* The scale for male teachers (for females 10 years less in each case) is—

LENGTH OF SERVICE IN YEARS.	PENSION IN FRANCS.
30	280
Between 30 and 32	300
" 32 " 34	320
" 34 " 36	340
" 36 " 38	360
" 38 " 40	380
More than 40	400

The following table* gives the statistics of the State pensions in Switzerland at the beginning of 1893:—

Canton.	Teachers.		Pensions.		
	Active.	Pen- sioned.	Total	Average Amount	Minimum and Maximum.
Zurich.			<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Primary teachers - - -	776	77	} 89,282	992 {	150—1,000
Higher primary teachers - -	214	13			500—1,400
Secondary teachers - - -	130	7	14,072	2,010	1,000—3,000
Bern.					
Primary teachers - - -	2,045	172	53,600	311	200—360
Higher primary and second- ary teachers - - -	373	19	23,000	1,211	500—300
Training College teachers - -	22	1	1,500	1,500	1,500
University teachers - - -	56	3	8,400	2,800	2,600—3,000
Former teachers in cantonal school - - -	—	3	4,900	1,633	1,000—2,500
Aargau.					
Primary teachers - - -	585	70	14,618	209	bis 500
Higher primary teachers - -	84	5	2,657	531	bis 1,200
Secondary teachers - - -	22	4	4,367	1,092	bis 2,200
Training College teachers - -	24	3	2,580	860	—
Baselstadt.					
University teachers - - -	44	} 22	41,790	1,899	bis 4,500
Other teachers - - -	376				
Glarus.					
Primary teachers - - -	109	11	3,500	308	100—400
Schaffhausen - - -	174	9	5,766	640	—
Total - - -	5,034	419	270,032	644	—
Vaud.†					
Primary teachers - - -	970	393	118,299	301	bis 500
Higher teachers - - -	250	90	39,559	440	bis 1,000

XIV.—OBLIGATORY AND VOLUNTARY UNIONS FOR PROVIDING PENSION FUNDS FOR OLD AGE, FOR FAILURE OF HEALTH, AND FOR WIDOWS AND ORPHANS.

Of the obligatory cantonal funds for teachers we shall as examples describe two which have different objects in view, namely those in cantons Neuchâtel and Zurich (see page 204).

* From Dr. A. Huber's *Jahrbuch des Unterrichtswesens in der Schweiz, 1892*, which contains very full information regarding teachers' pensions in Switzerland.

† This canton differs from the other six in two respects:—

(a) In it the teachers contribute a small sum yearly, whereas in the others the State bears the whole cost of the pensions. (b) In it a teacher gets a pension after a definite length of service, whereas in the other six he only gets a pension when incapacitated for work by reason of age or continued illness. Hence the much larger proportion of teachers in receipt of pensions in this canton than in the others.

In the former canton the Scholastic Provident Fund "Fond scolaire de prévoyance" was established by law in 1889.* It has for its purpose to help to provide substitutes for teachers when ill, to furnish suitable retiring pensions to the teaching profession, and, in case of death, to pay an insurance sum fixed by law. All masters and mistresses in primary and infant schools are compelled to join the fund; so also may teachers of special subjects of the primary school grade, and certificated masters and mistresses of orphan asylums and other institutions under State supervision.

The Scholastic Provident Fund for canton Neuchâtel

The members have to contribute 60 francs a year for 30 years, and this sum is deducted from their salary. Members who withdraw from the fund before the expiration of the 30 years get back the sum they have contributed without interest. If they rejoin the fund their previous service does not count unless they put into the fund again the sum withdrawn. The annual contribution by the State to the fund is fixed by law at £800.

Pensions and insurances are paid under the following conditions:—A teacher who has served for 30 years can resign on a maximum pension of £32 a year. In the case of the death of a member his direct heirs can claim an insurance amounting usually to £120, and, however flourishing the fund may be, these two figures cannot be exceeded so long as the State pays an annual subsidy. Distant relatives have no legal claim to the pension or insurance, but they or other persons who were supported by the deceased may with the consent of the State receive assistance.

The fund is administered by a committee consisting of a president appointed by the Council of State, and the teachers of each district nominate a member. The term of office is three years. The accounts are kept by the Education Department at the expense of the fund. At the end of the financial year, the committee, taking into consideration the available resources of the fund, and the claims on it, fixes, with the approval of the Council of State, for one or if possible more years, the amount of the annual pensions and the insurance sums. These are payable out of the contributions of the teachers, the interest on the fund, and one-half of the State grant. The other half of the grant is added to the capital until its total makes it possible to fix the age pensions and the insurances at the maximum of £32 a year, and £120 respectively for the next five years. Then the State contributions cease for the time.

In canton Zurich there are two unions for the support of teachers' widows, and orphans under 16 years of age, viz., one obligatory for all primary teachers, and the other for higher teachers and clergymen.

Obligatory Funds in canton Zurich for the support of Primary and Secondary Teachers' Widows and Orphans.

* Gesetz über den Primarunterricht des Kantons Neuenburg, vom 27 April, 1889. §§ 98-105.

The former fund was established in 1859, and the maximum pension granted has since then been twice doubled and for the last 10 years* has been fixed at £16 a year. Actuarial calculations showed that to make this possible an annual premium of 64 francs would be necessary. Of this the state pays 24 and each member 40 francs.

In the fund which all clergymen and higher teachers have to join the amount of pension is the same as the above, and so is the amount paid by the members, while the State contributes each year 36 francs per member.

Voluntary
unions.

In a few cantons (*e.g.*, Bern, Basel, St. Gallen, Tessin) there are voluntary unions for providing pensions to members, and their widows and orphans.

Voluntary
union in
canton Bern
for pensions
to members
and their
Widows and
Orphans.

The one in Bern has been in existence for over 80 years. It comprises two separate schemes—1. A pension scheme for all members or for their widows and orphans; 2. A life-assurance scheme. On 1st January, 1893, the membership of the first scheme was 311. Members are entitled to a life-pension of £2 per annum when they have completed their 56th year. Their widows, or the orphans under 18 years of age, receive a similar pension, the first payment being made a year after the member's death. Should a widow marry again she does not lose her pension. To obtain the above pension, or a certain amount of help should one break down before completing the 56th year, thirty annual payments have to be made to the fund—ten of £1, then ten of 12s., and lastly ten of 4s.

On 1st January, 1893, there were 141 teachers insured under the second scheme, some for £20, others for £40, others for £60, and the majority for £80. The capital was £3,185, and this permitted 10 per cent. being added to the above sums. The annual payments are regulated as follows:—

Age on enter- ing. Years.	Annual con- tribution in francs for an insurance of 1,000 francs.	Age on enter- ing.	Annual contri- butions.	Age on enter- ing.	Annual contri- butions.	Age on enter- ing.	Annual con- tribu- tion.
20	22	29	34	38	56	47	124
21	24	30	35	39	60	48	141
22	25	31	37	40	65	49	163
23	26	32	39	41	70	50	191
24	27	33	42	42	76	51	226
25	28	34	44	43	82	52	274
26	29	35	47	44	90	53	355
27	31	36	49	45	99	54	517
28	32	37	53	46	110	55	1,000

* Statuten der Witwen- und Waisenstiftung für zürcherische Volksschul-lehrer, vom 29 Oktober 1890. This contains also the necessary actuarial tables.

The payments made in three successive years in both parts of the scheme were:—

—	1890.	1891.	1892.
	£	£	£
Pensions - - - - -	710	672	652
Insurances - - - - -	264	264	198
Grants from the help fund -	25	30	30

XV.—DISTRICT AND CANTONAL CONFERENCES OF TEACHERS.

In all the Swiss cantons periodical conferences of teachers take place which are not only officially recognised, but are made compulsory by law. In some of the cantons, *e. g.*, Zurich, the Council of Education is represented at the conferences but does not control the meetings, but in the great majority of the cantons the meetings take place under the direct supervision of the Education Council, and are generally summoned and presided over by the school inspectors. These official meetings of teachers perform a most useful function in Swiss educational administration, for the authorities by means of them utilise the practical knowledge and experience of those actively engaged in teaching in connection with any proposed changes affecting the schools.

In canton Zurich all the primary and higher primary teachers in a district (the canton is divided into 11 school districts) form what is called a school chapter.* The district chapter meets every three months and attendance is compulsory. Any one absenting himself without permission is fined 3 francs, on the next occasion 5 francs, and so on with equal increments for each default, the fine going to the funds of the chapter library, which also receives a small yearly grant from the State. The chapters have for their aim the professional improvement of their members, and the furtherance of the cause of education, by means of practical exercises in teaching, lectures and discussions on educational and allied subjects, the propagation of good school treatises, the presenting of memorials to the Council of Education, or making proposals to the school synod. The chapters are always consulted by the Council of Education before any important change in the regulations of the public schools is made (§ 316 of the law of 1859). After the eleven chapters have individually considered the matter, a joint conference is held in order to put the result of the deliberations into definite form. To this joint conference each chapter sends

The school-chapter in canton Zurich.

The chapters are consulted by the Council of Education on any change contemplated in the schools.

* Reglement für Schulkapitel und Synode vom 23 März, 1895, and sections 315–330 of the Gesetz über das gesammte Unterrichtswesen des Kantons Zürich vom 23 Dezember 1859.

a delegate, other members being the committee of the school synod (see below), and a representative of the Education Council. The synod's committee transmits the result of the conference to the Council of Education.

Before the end of March of each year the president of the synod summons a conference of the presidents of the chapters and the committee of the synod in order to deal with (1) any communications from the Council of Education; (2) reports concerning the deliberations of the chapters during the past year; (3) subjects to be deliberated on by the chapters in the approaching school year,—such as specifying some subjects for practical exercises in teaching, themes for essays, lectures, or discussions; (4) proposal to the Council of Education concerning the prize essays for primary teachers; (5) any other motion to be submitted to the Council of Education. The secretary of the synod sends a minute of the conference to the Education Council, which, after considering the recommendations thus expressed, sends to the chapters the necessary directions before the beginning of the next school-year.

The School
Synod in
canton
Zurich.

We have had occasion above to make frequent mention of the school synod. This consists of the members of all the chapters in the canton, and teachers holding permanent appointments in the higher schools, but not the University. It thus unites all the teachers of the primary, higher primary, and secondary schools of the canton. Members of the committees of management of cantonal or secondary schools, and of the district school committees can take part in the deliberations of the synod. The Council of Education of the canton is represented by two of its members.

The synod meets once a year, but special meetings can be called if necessary. The business and order of procedure are always arranged at least 14 days beforehand by a Prosynod, which consists of a deputy from each chapter and from each higher school, the synodal committee, and the two representatives of the Council of Education.

The synod has submitted to it the annual report by the Council of Education to the Council of State on the condition of education in the canton. It deliberates in general on the means of advancing public instruction in the canton, and on any wishes and proposals to be submitted by it to the school authorities. An abstract of the deliberations of the synod is printed at the expense of the State, and sent to all its members, to the Council of Education, and to every grade of school committee in the canton.

School Synod
in canton
Bern.

In canton Bern the constitution of the school synod* differs somewhat from the above. It consists of delegates elected by all the enfranchised citizens of the canton in the proportion of one member to every 5,000 of population. The delegates appointed are generally members of the teaching profession, and their term of office is four years. The synod

* Loi sur le synode scolaire du 2 novembre 1848, modifiée par la loi sur l'instruction primaire du 6 mai 1894, et par décret du Grand Conseil du novembre, 1894.

nominates its committee consisting of a president and eight members. The synod meets once a year, but extraordinary meetings can be called by the Director of Education, who also takes part in the deliberations or is represented by a substitute. It discusses any matters submitted to it by the Council of Education or by its own committee. It can of its own accord submit proposals on school matters to the central authorities. According to Section 6 of the Synod Law the synod or its committee is asked to give its opinion on intended changes in the instruction and organisation of all grades of public schools except the University. The committee draws up a report on the deliberations of the synod, and this is printed in French and German and communicated to the Council of Education.

The members of the synod are remunerated for their attendance at the same rate as members of the Great Council, viz., 7 francs per day, and 30 cents for each kilometre they have to travel by rail, and 50 cents per kilometre by coach.

The regulations for teachers' conferences in Baselstadt are quite different from those in the other cantons. There are no chapters nor synod, but it is enacted that the teachers of a school—whether primary, secondary, modern or classical—have to meet in conference at least once a month under the guidance of the headmaster or an inspector. These teachers' conferences deliberate on the existing regulations for the management of the internal affairs of the school, have to give an opinion on subjects submitted to them by the school committee, and can make recommendations on matters which concern the school. The teachers are bound to attend the meetings regularly, and co-operate in every way for the success of the school.

Staff Conferences in Baselstadt.

XVI.—GENERAL CONCLUSIONS FROM THE CONSIDERATION OF THE TRAINING AND STATUS OF TEACHERS IN SWITZERLAND.

From the account we have given it will be seen that the Swiss schoolmaster first receives a sound general education by spending six years at a primary school, thereafter generally three years at a sekundarschule (see second column of Appendix IV.), and then at the age of about 15 he enters a Training College, where for at least two years more his general education is continued, and only during the latter part of his course, at the age of about 17, does he commence his practical training. The English method, on the other hand, is to allow the general and the professional education to proceed side by side, very much to the detriment of both. The national work of educating the people should not be rushed into prematurely. A youth of 14 cannot educate others for he has not the necessary tools, nor the ability to use them though he had them. At such an age, when the mind is most susceptible and receptive, the future teacher should not be

(a) Teachers should have an adequate liberal education as a preliminary to professional education.

acquiring mechanical dexterity, but rather the harmonious development of his intellectual powers, and habits of discipline and mental application which will be the best preparation for his subsequent practical training. This is, moreover, the only means of raising the level of the work in our Training Colleges, and enabling them to give more attention to the professional equipment of the students, which should be their proper function.

At any rate, nothing can be more harmful to the teaching profession, or any other, than to commence the special preparation for it too early in life,* and consequently place more stress upon the mechanical part of it than on scientific knowledge. Its members must be lacking in that general culture on which the social status of a profession and its place in the public esteem mainly depend. But we advocate a broader and deeper education of the teacher, not merely for his own sake, but in the interest of the nation, for in his hands lies the intellectual training of the rising generation for the practical duties of citizenship, and in his training we have the best guarantee of an adequate return for the large sums expended on public instruction.

b) Teachers should, as far as possible, be educated alongside of those preparing for other professions.

A perusal of the list of institutions, mentioned in Appendix I., for preparing teachers in Switzerland will show that in fully one-fourth of the cases they are not mere Training Colleges, but form part of larger establishments for providing secondary instruction, in which the future teachers receive their general education side by side with those preparing for other paths of life. This is, perhaps, one of the best features of the Swiss training system, and points to one of the worst faults in our own. No one need wonder at the professional narrowness and want of culture, with which the primary teacher is sometimes charged, if we remember that from the age of 14 he has been separated from those preparing for other professions, and after being a pupil in an elementary school he became a boy-teacher in an

* Sir Andrew Noble, one of the partners of the great Elswick engineering works, in addressing the students of the City and Guilds Central Technical College, London, 3rd Oct., 1899, said:—"I am continually being asked what education I should recommend for a lad entering Elswick. I always say, 'Send your son to as good a school as you can, keep him there as long as you can, do not curtail his time of schooling, do not stunt his early intellectual growth by narrowing it down to any special study.' . . . Some of you may have heard, no doubt, the answer of the Duke of Wellington to a father who asked him what was the best education for his son, preparatory to joining the army, 'The best education you can give him.'"

"It was a very pregnant utterance, terse and to the point, as nearly all the Great Duke's were, and it remains as true for any other profession as for the army."

"Those men who, with fair abilities, have received a really good education, have been taught to use their minds, and who, by contact with other students, have acquired habits of application, amply make up for their late start by the power of mind and grip they bring to their work. They are fresh and keen when others, who have been hammering away at semi-technical work from early boyhood, have become stale and less vigorous."—(From *Nature*, 5th October, 1899.)

elementary school, then went to a Training College where he mingled only with those preparing for the same work, and then returned in the majority of cases to spend his life in an elementary school. Why should an exception from the usual procedure be made in the case of the primary teacher, through whom the best thought and culture of our times should find their way into our schools? Why should not he be educated alongside of those preparing for other professions, until the time has come for him to specialise with a view to his future career?

Those destined to become elementary school teachers should, until the age of, say, 16, be educated in a secondary school, not of the classical, but of the best "modern" type. At each large centre there might be one such school with classical and literary leanings, and one with modern language and scientific leanings. At the one the future teacher would meet with students going to the University, and at the other with those preparing for technical colleges and scientific and commercial pursuits. Entering a Training College at the age of 16 or 17, the young teacher should continue his general education, stress being, however, laid on subjects most necessary for an elementary school teacher, and during the latter half of his curriculum, he should be put through a very thorough course in the theory and practice of teaching. During the last two years all those who have passed the preliminary examination of the Universities should be sent there, and be released from all Training College work except the practical training.

The University of Basel enjoys the distinction of being the only one in Switzerland which takes a direct share in the work of training primary teachers (see Appendix I). Apart from this there is no provision made for sending the best seminarists to the Universities while in training. Indeed, in no country in Europe have primary teachers the same opportunities of higher education as in Great Britain. In Scotland, for example, from one-half to two-thirds of the male students, and a considerable number of the female students are sent by the Training College authorities for two or three years to University classes. The influence of this on primary, and especially higher primary, instruction can hardly be overrated. Knowledge is only a part of the equipment of a school teacher, but it is not the least part, and all the assistance that knowledge and wide culture can give him should be at his disposal. There are those who even go the length of advocating that the Universities should take over the whole of the work of the Training Colleges. But it seems impossible that the few Universities could do with efficiency the work that requires so many Training Colleges. In the great task of educating the elementary schoolmaster, there is plenty of work both for the Universities and the Training Colleges, the one supplementing the work of the other. Let the colleges make every possible use of the Universities, and there will be still plenty of work for them to do which the Universities cannot do, and yet essential to the elementary schoolmaster.

(c) Students of Swiss Training Colleges have not the opportunity of attending University classes.

(d) The examination for the Teachers' Certificate should be taken in two instalments, and be partly written, oral, and practical.

(e) It would be advantageous to have regular staff-conferences in elementary and secondary schools and colleges.

(f) A consultative or advisory committee consisting of those actively engaged in the work of Education, i.e., representatives of School Boards and School Committees, of the Inspectorate, and of all grades of Teachers.

In Swiss Colleges the final examination is divided into two parts, one taking place in the penultimate year, and consisting chiefly of an examination in general knowledge; and the other part at the end of the course, and including the more strictly professional and practical part of the examination. Considering the very wide range of the certificate examination in our country it would be an advantage to divide it into two parts. At present the long and trying examination is to some as much a test of strength as of knowledge. In this way fewer subjects would be studied at one time, for there can be no doubt that the present system tends to produce superficiality rather than depth.

In the course of the Report we have had occasion to mention the regular periodical conferences of the staffs of Swiss schools—particularly secondary schools. In these meetings, presided over by the headmaster, the teachers deliberate on everything that concerns the welfare of the school, its organisation, time-table, etc. Their opinion on any point may be asked by the school authorities, and they can make recommendations to the same.

Similar conferences of the staffs of schools and colleges in this country could not fail to be useful in many ways, such as in graduating properly the school work and in securing greater uniformity of standard and unity of purpose.*

This report will have shown that while teachers in Switzerland receive moderate remuneration, they enjoy many compensating advantages. A safe pension to a large extent relieves them from the gnawing anxiety regarding age and illness. They have comparative security of tenure, with the right of appeal to the central authority, and this, too, in one of the most democratic countries of the present day. Education is in Switzerland considered one of the chief duties of the State, and teachers are esteemed as public officials discharging an important function in the nation. Through their school chapters and school synods they have a voice in the school legislation of their country. Each chapter appoints a member of the School Committee of the district, and the synod nominates two of the seven members of the Education Council of the canton, and thus the teachers have a share too in the school administration of their country.†

It is a matter well worthy of consideration whether we in this country might not benefit from the deliberations of educational assemblies formed on lines similar to those adopted in the canton of Zurich and described on page 212 above. Not that the circumstances and the organisation of a single canton can be likened to the far more complex and varied conditions which have to be taken into account in a large country like England. Nor, in a matter so national in many of its aspects as education, and so little confinable within the precise limits

* Staff conferences are now regularly held in some schools in this country, and the results have been favourable to educational efficiency and to unity of action.

† Mr. R. L. Morant, at p. 26, vol. iii. of *Special Reports*, in his Memorandum on "The National Organisation of Education in Switzerland" also points out the importance of the school synods.

of any local or even provincial boundary, could any county or group of counties in such a country as England enjoy the sovereign rights and the degree of administrative independence which are the prerogatives of each canton of Switzerland. Nevertheless, when every such qualification has been fully made, there remain many points in which we might benefit by following Swiss example. Many students of educational administration would, for example, regard it as advantageous to provide, according to some more systematic and general plan, for the official representation of teachers on local educational authorities in such a manner as to bring their experience and practical knowledge more continuously to bear upon the conduct of educational affairs. Again, were it found possible to form county or provincial assemblies comprising representatives of all grades of teachers, school authorities, education committees and school inspectors, might not the experience and practical knowledge of such gatherings prove of great service to the central authorities and to public opinion? And, the practical and other difficulties once surmounted, would not the regular meetings and the free but well-arranged discussions of such assemblies do something to widen the outlook of each section of the teaching profession; to further the growth of a larger view as to the unity of national education; to kindle enthusiasm for the work of teaching; to prevent more strictly educational problems being overlooked in the discussion of those which are administrative, or, conversely, the difficulties of public administration being ignored in the advocacy of purely educational advantage; and, while not seeking to supersede the efforts of such sectional societies as may be found to be under present conditions indispensable, to correct the narrowness of outlook which is frequently characteristic of sectional effort, and, so far as may be, to fuse special and separate tendencies in one common movement towards increased educational efficiency?

In concluding this Report I desire to express my gratitude for information kindly given by Dr. Gobat, Director of Education for canton Bern, Dr. A. Huber, Secretary of Education for canton Zurich, Doctors Utzinger and Bosshart of Küssnacht Training College, and MM. Schaller and Duvoisin, Directors of the Training Colleges at Porrentruy and Delémont respectively.

ALEX. MORGAN.

December, 1899.

APPENDIX I.

A LIST OF THE SWISS TRAINING COLLEGES FOR PRIMARY
TEACHERS IN 1895.

Canton.	Belonging to the State.	Belonging to the Commune.	Private Institutions.
AARGAU	Training College for Men at Wettingen, course 4 years.	Training College for Women at Aarau, course 4 years.	
BASELSTADT	Special Course in the University of Basel for the education of Primary Teachers, course 3 to 4 half-years. Pedagogic Department of the Continuation Classes in the Daughters' School, Basel, course 2 years.		
BERN	Training College (German) for Men at Münchenbuchsee (Hofwyl), course 3½ years. Training College (German) for Women at Hindelbank, course 3 years. Training College (French) for Men at Porrentruy, course 4 years. Training College (French) for Women at Delémont, course 3 years.	Training College for Women in connection with the Town School for Girls, course 3 years. In the 6th course of the Secondary School at Saignelégier, pupils under 16 years of age receive instruction in Pedagogy for the entrance examination into a Training College.	Training College (Evangelical) for Men at Muristaliden, near Bern, course 4 years. Age 15 years. Training College (Evangelical) for Women in connection with the New School for Girls, course 3 years. Age 15.
FRIBOURG	Training College for Men at Hauterive, course 4 years.	—	Free Secondary and Normal School of St. Ursula at Fribourg, course 5 years (4 Secondary Course, 1 Training College course)
GENEVA	Pedagogic Section (Training College for Men) of the College of Geneva, course 4 years. Pedagogic Section (Training College for Women) of the Secondary and Superior School for Girls at Geneva, course 2 years.		
GRISONS	Training College for Men at the Cantonal School of Chur, course 3 years. Proseminar at Roveredo.	—	Training College for Men at Schiers, course 3 years. Age 15.
LUCERNE	Training College for Men at Hitzkirch, course 4 years.		
NEUCHÂTEL	Pedagogic Section of the Cantonal Gymnasium at Neuchâtel. (a) for Men, course 3 years. (b) for Women, course 3 years.	Secondary and Industrial Schools at Chaux-de-Fonds, Fleurier, Cernier, and Locle, course 5 years. Age at entrance, Boys 13, Girls 12.*	Training College for Men at Peseux.
OBWALDEN	—	—	Training College for Women at the Melchtal Institute, Kerna, course 3 years.

* In these schools instruction is given in Pedagogy and in the Frobelian occupations. They prepare students for the Certificate Examinations for Teachers in Primary and Infant Schools, and are thus in a sense Training Colleges or Proseminaries.

A LIST OF THE SWISS TRAINING COLLEGES FOR PRIMARY
TEACHERS IN 1895—*cont.*

Canton.	Belonging to the State.	Belonging to the Commune.	Private Institutions.
SCHAFFHAUSEN	Training College Section of the Cantonal School of Schaffhausen, course 4 years.		
SCHWIZ	Training College for Men at Rickenbach. A Preparatory course, and thereafter a 3 years' course.	—	Training College for Women at the "Theresianum," Ingenbohl. (a) German Section with course of 3 years. Age 15. (b) French Section with course of 2 years. Age 15.
SOLOTHURN	Pedagogic Department of the Cantonal School, course 4 years.		
ST. GALLEN	Training College at Rorschach (Maria-berg), course 3 years. At St. Gallen Cantonal School there is a course for preparing candidates for Higher Primary Schools (<i>Sekundarschulen</i>).		
TESSIN (Ticino)	Training College for Men at Locarno. Training College for Women at Locarno. In both a course of 3 years.		
THURGAU	Training College for Men at Kreuzlingen, course 3 years.		
VALAIS	Training College (German) for Women at Brig, course 2 years. Training College (French) for Women at Sion, course 2 years. Training College (French and German) for Men at Sion. In each section a course of 2 years.		
VAUD	Training College for Men at Lausanne, course 4 years. Training College for Women at Lausanne, course 3 years. Froebelian Seminary for preparing teachers of Handicraft.		
ZUG	—	—	Training College (Free Catholic) for Men at St. Michael, course 3 years. Age 16. Training College for Women at Menzingen, age 14 to 15. (a) German Section, course 4 years. (b) French Section, course 3 years.
ZÜRICH	Training College (for both Men and Women) at Küssnacht, course 4 years.	Training College for Women in the Higher Girls' School at Zurich, course 4 years.	Training College (Evangelical) for Men at Unterstrass in Zurich, course 4 years. Age 15.

NUMBER OF HOURS PER WEEK
IN TRAINING COLLEGES IN 1881

	Latin	Mathematics	Natural Science, Chemistry and Physics	Geography	History	Pedagogy	Professional Subjects	Agriculture	Drawing	Singing and Music
1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1	1	1	1
22	1	1	1	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1	1	1	1
24	1	1	1	1	1	1	1	1	1	1
25	1	1	1	1	1	1	1	1	1	1
26	1	1	1	1	1	1	1	1	1	1
27	1	1	1	1	1	1	1	1	1	1
28	1	1	1	1	1	1	1	1	1	1
29	1	1	1	1	1	1	1	1	1	1
30	1	1	1	1	1	1	1	1	1	1
31	1	1	1	1	1	1	1	1	1	1
32	1	1	1	1	1	1	1	1	1	1
33	1	1	1	1	1	1	1	1	1	1
34	1	1	1	1	1	1	1	1	1	1
35	1	1	1	1	1	1	1	1	1	1
36	1	1	1	1	1	1	1	1	1	1
37	1	1	1	1	1	1	1	1	1	1
38	1	1	1	1	1	1	1	1	1	1
39	1	1	1	1	1	1	1	1	1	1
40	1	1	1	1	1	1	1	1	1	1
41	1	1	1	1	1	1	1	1	1	1
42	1	1	1	1	1	1	1	1	1	1
43	1	1	1	1	1	1	1	1	1	1
44	1	1	1	1	1	1	1	1	1	1
45	1	1	1	1	1	1	1	1	1	1
46	1	1	1	1	1	1	1	1	1	1
47	1	1	1	1	1	1	1	1	1	1
48	1	1	1	1	1	1	1	1	1	1
49	1	1	1	1	1	1	1	1	1	1
50	1	1	1	1	1	1	1	1	1	1
51	1	1	1	1	1	1	1	1	1	1
52	1	1	1	1	1	1	1	1	1	1
53	1	1	1	1	1	1	1	1	1	1
54	1	1	1	1	1	1	1	1	1	1
55	1	1	1	1	1	1	1	1	1	1
56	1	1	1	1	1	1	1	1	1	1
57	1	1	1	1	1	1	1	1	1	1
58	1	1	1	1	1	1	1	1	1	1
59	1	1	1	1	1	1	1	1	1	1
60	1	1	1	1	1	1	1	1	1	1
61	1	1	1	1	1	1	1	1	1	1
62	1	1	1	1	1	1	1	1	1	1
63	1	1	1	1	1	1	1	1	1	1
64	1	1	1	1	1	1	1	1	1	1
65	1	1	1	1	1	1	1	1	1	1
66	1	1	1	1	1	1	1	1	1	1
67	1	1	1	1	1	1	1	1	1	1
68	1	1	1	1	1	1	1	1	1	1
69	1	1	1	1	1	1	1	1	1	1
70	1	1	1	1	1	1	1	1	1	1
71	1	1	1	1	1	1	1	1	1	1
72	1	1	1	1	1	1	1	1	1	1
73	1	1	1	1	1	1	1	1	1	1
74	1	1	1	1	1	1	1	1	1	1
75	1	1	1	1	1	1	1	1	1	1
76	1	1	1	1	1	1	1	1	1	1
77	1	1	1	1	1	1	1	1	1	1
78	1	1	1	1	1	1	1	1	1	1
79	1	1	1	1	1	1	1	1	1	1
80	1	1	1	1	1	1	1	1	1	1
81	1	1	1	1	1	1	1	1	1	1
82	1	1	1	1	1	1	1	1	1	1
83	1	1	1	1	1	1	1	1	1	1
84	1	1	1	1	1	1	1	1	1	1
85	1	1	1	1	1	1	1	1	1	1
86	1	1	1	1	1	1	1	1	1	1
87	1	1	1	1	1	1	1	1	1	1
88	1	1	1	1	1	1	1	1	1	1
89	1	1	1	1	1	1	1	1	1	1
90	1	1	1	1	1	1	1	1	1	1
91	1	1	1	1	1	1	1	1	1	1
92	1	1	1	1	1	1	1	1	1	1
93	1	1	1	1	1	1	1	1	1	1
94	1	1	1	1	1	1	1	1	1	1
95	1	1	1	1	1	1	1	1	1	1
96	1	1	1	1	1	1	1	1	1	1
97	1	1	1	1	1	1	1	1	1	1
98	1	1	1	1	1	1	1	1	1	1
99	1	1	1	1	1	1	1	1	1	1
100	1	1	1	1	1	1	1	1	1	1

(a) Including methodology. (b) Practice in teaching. (c) In this course, the second for instrumental instruction. (d) In this course, the second for instrumental instruction. (e) In this course, the second for instrumental instruction. (f) In this course, the second for instrumental instruction. (g) Method, and exercises in teaching in Primary and Secondary schools. (h) Method, and exercises in teaching in Primary and Secondary schools. (i) Method, and exercises in teaching in Primary and Secondary schools. (j) Method, and exercises in teaching in Primary and Secondary schools. (k) Method, and exercises in teaching in Primary and Secondary schools. (l) Method, and exercises in teaching in Primary and Secondary schools. (m) The six numbers in this course are devoted to swimming. (n) The six numbers in this course are devoted to swimming. (o) The six numbers in this course are devoted to swimming. (p) The first number is for practice in teaching manual instruction in the school. (q) Method. (r) The first two classes have one hour book-keeping. (s) Cosmography and book-keeping. (t) Including land measurement.

NDIX II.—THE BRANCHES OF INSTRUCTION AND THE NUMBER OF
HOURS PER WEEK ASSIGNED TO EACH, IN THE SWISS STATE TRAINING
COLLEGES IN 1895—continued.

	Yearly Courses.	Half-yearly Courses.	Religion.	German.	French.	Italian.	English.	Latin.	Mathematics.	Natural Science.	Chemistry and Physics.	Geography.	History.	Pedagogy.	Professional Subjects.	Agriculture.	Drawing.	Singing and Music.	Writing.	Gymnastics.
Basle.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-St. Gallen.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1	1	5	2	1	2	2	1	1	1	3	2-2d	1	2
Basle-Ville.																				
College for Men	I. 1	1	3	4	3	1	1	1	6g	2	1	2	2	1	1	1	3	2-2d	1	2
College for Women	II. 1	1	3	4	3	1	1													

APPENDIX III.

TEACHING STAFFS OF STATE TRAINING COLLEGES IN SWITZERLAND IN 1895.

Canton Aargau.	Number of (at 31st March, 1885)		Sex.	Age.	Altogether.	Years of Service.	In present post.	Nature of appointment (d = definitive, p = provisional).	Proprietary Study.	Subjects taught by the Teacher.	No. of Hours per week.	Annual Salary.	Remarks. (Nos. within brackets in this column give the total No. of week hours served altogether by the teacher in the T.C. and elsewhere for the annual salary stated.)	
	Scholars.	Principal Teachers.												Assistant Teachers.
Training College for Men at Wettingen.	73	1	1	M	50	36	19	d	Pa	Mathematics, Drawing	19	3,650	Garden.	
				M	46	25	9	p	T	Agriculture	3	2,960	House and Garden.	
				M	41	16	4	p	U	Religion	4	710		
				M	45	34	20	p	U	History, German	20	3,500		
				M	40	30	9	p	U	Practising School, Method	2	2,400	(82)	
				M	52	23	9	p	U	German, Pedagogy	17	5,000	House and Garden.	
				M	51	19	4	p	U	Religion	2	380		
				M	39	19	13	p	U	Gymnastics	2	800		
				M	34	12	9	p	U	Natural Science, Writing	6	3,200	House and Garden.	
				M	35	10	1	p	U	French, Geography	20	2,850	House and Garden.	
				M	34	12	12	p	U	Music	21	2,960	House and Garden.	
				M	38	28	35	p	A	Drawing	8	1,400		
Daughters' Institute and Training College for Women at Aarau.	65	1	1	M	51	28	22	d	T	Singing	5	625		
				F	44	25	15	d	U	History, Italian, Religion	23	2,000		
				F	50	23	22	d	F	French, English	21	2,500		
				M	43	3	1	d	U	Music	15	1,900		
				M	33	9	7	d	U	Mathematics, French	20	3,200		
				M	41	19	19	d	U	Geography, Natural Science, Writing	23	3,300		
				F	27	8	3	d	T	Gymnastics	2	200		
			M	51	28	8	d	U	German, Pedagogy	24	4,500			
			M	58	28	19	p	A	Drawing	5	1,000			

APPENDIX III.—TEACHING STAFFS OF STATE TRAINING COLLEGES IN SWITZERLAND IN 1895—continued

	Number of (at 31st March, 1896).		Sex.	Age.	Years of Service.		Nature of appointment (d = definitive, p = provisional).	Preparatory Study.	Subjects Taught by the Teacher.	No. of Hours per week.	Annual Salary.	Remarks. (Nos. within brackets in this Column give the Total No. of week hours served altogether by the teacher in the T. C. and elsewhere for the annual salary stated.)	
	Scholars.	Principal Teachers.			Assistant Teachers.	Altogether.							In present post.
Canton Bern—continued Training College for Women in connection with the State School for Girls in Bern.	77	1	—	M	50	30	4	p	U	Pedagogy, History - Geography, Physics - German -	16 9 9	5,600c 4,600 2,180	(28)
	—	1	—	M	29	4	4	p	U	French -	9	1,200	(28)
	—	1	—	M	41	22	5	p	U	Natural Science -	12	4,200	(28)
	—	1	—	M	56	38	9	p	U	Mathematics -	10	4,200	(28)
	—	1	—	M	45	15	15	p	U	Singing, Harmonium -	9	1,200	(28)
	—	1	—	M	42	23	15	p	U	Gymnastics -	6	950	(28)
	—	1	—	M	60	27	21	p	U	Religion -	6	900	(28)
	—	1	—	M	31	13	3	p	U	Writing -	4	600	(28)
	—	1	—	F	59	25	25	p	U	Manual Instruction -	10	1,200	(28)
	—	1	—	F	56	20	30	p	U	Drawing -	6	900	(28)
	—	1	—	F	63	39	22	p	U	English -	6	1,950	(14)
	70	1	—	M	43	13	13	d	A	French, Pedagogy, History - Religion, French, Pedagogy -	14 17	2,100b 1,700	(14)
	—	1	—	M	34	16	5	d	A	Mathematics, Natural Hist., Drawing -	27	2,000	(14)
	—	1	—	M	34	13	5	d	U	French, History, Geography, Nat. Hist.	19	2,000	(14)
—	1	—	M	44	25	21	d	U	Music, Gymnastics -	13	1,650	(14)	
—	1	—	M	36	17	7	d	U	Book-keeping, Writing -	4	1,550	(14)	
—	1	—	M	63	27	12	p	U	Gymnastics -	4	300	(14)	
—	1	—	M	53	27	2	d	P	Method, Arith., Nat. Sc., Draw., Writing -	4	300	(14)	
52	1	—	M	46	26	22	d	T	Religion, Pedagogy, German -	24	2,600	(14)	
—	1	—	M	48	19	19	d	U	Music -	17	2,800b	(14)	
—	1	—	M	34	14	10	d	U	French, Geog., Mathematics, Drawing -	26	2,600	(14)	
—	1	—	M	46	25	22	d	U	German, French, History, Geography -	23	2,600	(14)	
—	1	—	M	26	2	1	d	U	German, French, History, Geography -	22	2,400	(14)	

Canton Schwyz.									
Training College for Men at Rickenbach									
40	1	1	1	1	1	5	1	1	1,500
	1	1	1	1	1	3	1	1	1,400
	1	1	1	1	1	1	1	1	1,400
	1	1	1	1	1	11	1	1	1,300
	1	1	1	1	1	-	1	1	300
									Free House.
Canton St. Gallen.									
Training College for Men at Rorschach.									
64	1	1	1	1	1	12	6	6	3,000
	1	1	1	1	1	17	16	16	3,000
	1	1	1	1	1	9	7	7	2,600
	1	1	1	1	1	33	7	7	2,600
	1	1	1	1	1	40	24	17	2,600
	1	1	1	1	1	45	28	4	2,600
	1	1	1	1	1	51	25	16	2,600
	1	1	1	1	1	27	6	6	2,600
	1	1	1	1	1	56	6	6	2,600
									Free House.
Canton Tessin (Ticino).									
Training College for Men at Locarno.									
37	1	1	1	1	1	8	7	7	2,500
	1	1	1	1	1	18	7	7	1,700
	1	1	1	1	1	30	5	5	1,700
	1	1	1	1	1	33	4	4	1,700
	1	1	1	1	1	30	1	1	1,700
	1	1	1	1	1	35	16	1	1,100
	1	1	1	1	1	28	12	2	1,800
	1	1	1	1	1	40	15	2	1,700
	1	1	1	1	1	25	2	2	1,700
	1	1	1	1	1	26	2	2	350
									1,000
									(18)
									(6)
Training College for Women at Locarno									
54	1	1	1	1	1	2	2	2	156
	1	1	1	1	1	39	24	2	1,200
	1	1	1	1	1	21	6	2	1,200
	1	1	1	1	1	20	4	2	800
	1	1	1	1	1	23	5	2	800
	1	1	1	1	1	23	5	2	800
	1	1	1	1	1	30	1	1	800
	1	1	1	1	1	40	15	2	1,100
	1	1	1	1	1	28	2	2	1,100
	1	1	1	1	1	-	-	-	do.
									7
Canton Valais.									
Training College for Men at Sion.									
40	1	1	1	1	1	12	6	6	3,000
	1	1	1	1	1	17	16	16	3,000
	1	1	1	1	1	9	7	7	2,600
	1	1	1	1	1	33	7	7	2,600
	1	1	1	1	1	40	24	17	2,600
	1	1	1	1	1	45	28	4	2,600
	1	1	1	1	1	51	25	16	2,600
	1	1	1	1	1	27	6	6	2,600
	1	1	1	1	1	56	6	6	2,600
									Free House.
Canton Vaud.									
Training College for Men at Yverdon.									
37	1	1	1	1	1	8	7	7	2,500
	1	1	1	1	1	18	7	7	1,700
	1	1	1	1	1	30	5	5	1,700
	1	1	1	1	1	33	4	4	1,700
	1	1	1	1	1	30	1	1	1,700
	1	1	1	1	1	35	16	1	1,100
	1	1	1	1	1	28	12	2	1,800
	1	1	1	1	1	40	15	2	1,700
	1	1	1	1	1	25	2	2	1,700
	1	1	1	1	1	26	2	2	350
									1,000
									(18)
									(6)
Canton Valais.									
Training College for Women at Yverdon.									
54	1	1	1	1	1	2	2	2	156
	1	1	1	1	1	39	24	2	1,200
	1	1	1	1	1	21	6	2	1,200
	1	1	1	1	1	20	4	2	800
	1	1	1	1	1	23	5	2	800
	1	1	1	1	1	23	5	2	800
	1	1	1	1	1	30	1	1	800
	1	1	1	1	1	40	15	2	1,100
	1	1	1	1	1	28	2	2	1,100
	1	1	1	1	1	-	-	-	do.
									7

(J) Professor at University

(c) Including Practising School.

(d) Teaches also in Practising School.

(e) Including allowance as Rector.

(f) Rector.

(g) Private Study.

(h) Seminary for Priests.

(i) Pomologisches Institut.

APPENDIX III.—TEACHING STAFFS OF STATE TRAINING COLLEGES IN SWITZERLAND IN 1895—continued.

	Number of at 31st March, 1896.			Sex.	Age.	Years of Service.		Nature of appointment (d = definite, p = provisional).	Preparatory Study.	Subjects Taught by the Teacher.	No. of Hours per week.	Annual Salary.	Remarks. (Nos. within brackets in this Column give the Total No. of week hours served altogether by the teacher in the T. C. and elsewhere for the annual salary stated.)
	Scholars.	Principal Teachers.	Assistant Teachers.			Altogether.	In present post.						
Canton Thurgau.													
Training College for Men at Kreuzlingen	80	1	-	M	70	52	41	d	U	Religion, Pedagogy, German German, Geog. Hist., Writ., Bk.-keeping Mathematics, Natural Science Singing, Music Drawing, Gymnastics, Music French, German, Geography, Writing Religion Practising School, Method	18 23 26 27 18 17 6 1	4,800/ 8,500/ 9,000/ 9,400/ 1,800/ 1,800/ 600 2,000s	House. House. A. A. House.
Canton Valais.													
Training College (German) for Women at Brig.	13	1	-	M	67	41	2	d	U	Religion Natural Science, Singing, Drawing Languages, Pedagogy, Writing Arithmetic, History, Geography Bible, Manual Instruction	8 8 23 22 1	100 400 1,000 1,000 1,000	House.
Training College (French) for Women at Sion.	20	1	-	F	58	41	41	d	T	French, Pedagogy Sewing French, Arithmetic Geography, History, Religion Drawing Writing Catechism Singing	94 6 8 12 2 2 1 1 3	1,000s 350 400 600 200 200 100 100 250	House.
Training College (French and German) for Men at Sion.	50	1	-	M	62	44	20	d	U	Pedagogy, History, Agriculture French German Drawing Geography, Music Drawing, Writing Mathematics Gymnastics Religion Natural Science	11 20 20 2 22 6 20 8 1	1,000 900 900 400 900 900 1,050s 1,100 1,100	House.

[illegible]

Training College (French) for Women at Sion.	15	P	39	46	-	I.	-	-	15	30	26	5,250	-	40,169	5,867	-	40,169	-	5,867	-	720	-	6,587
Training College (French and German) for Men at Sion.	15	P	44	45	-	I.	-	30	-	50	50	9,000	-	111,395	16,000	-	111,395	-	16,000	-	-	-	16,000
Canton Vaud.																							
Training College at Lausanne:																							
(a) for Men.	15	P	40	39	-	I.	-	88	-	129	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) for Women.	16	P	40	33	-	II.	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						III.	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						IV.	-	22	-	31	108	-	-	-	-	-	-	-	-	-	-	-	-
						I.	-	-	-	41	-	-	-	-	-	-	-	-	-	-	-	-	-
						III.	-	-	-	36	-	-	-	-	-	-	-	-	-	-	-	-	-
Canton Zurich.																							
Training College at Küssnacht for Men and Women.	15	P, S, 3	40	36	6	I.	-	25	8	108	135	37,110	-	141,886	83,092	600	141,886	-	83,092	-	1,003	-	90,366
Training College Department of Higher Daughters' School at Zurich. I	15	P, S, 3	40	34	4	II.	-	47	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						III.	-	55	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						IV.	-	42	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-
						I.	-	-	-	24	69m	-	-	-	-	-	-	-	-	-	-	-	-
						II.	-	-	-	15	-	-	-	-	-	-	-	-	-	-	-	-	-
						III.	-	-	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-
						IV.	-	-	-	14	-	-	-	-	-	-	-	-	-	-	-	-	-

(a) 36 francs per month—9 months. (b) Free for those belonging to canton; others pay 80 francs per annum. (c) Included in value of buildings. (d) Besides 6,400 francs for bursaries, and a grant of the free use of the buildings, garden, and fields for cultivation. (e) The pupils board in the convent and the State pays half of this. (f) The buildings and teachers are provided by the Ursuline convent in Brig. (g) Exclusive of a grant of 5,250 for bursaries. (h) For year 1890. (i) Those belonging to canton free, others 60 francs per annum. (j) Its value (84,500 francs) is included in value of buildings. (k) The pupils are partly seminarists and partly pupils finishing their school education; for the latter the obligatory subjects are German, French, English, Latin, Mathematics, Natural Science, History, and Geography; for the seminarists all these subjects are obligatory except English, Latin, and Analytical Geometry. (m) 53 seminarists, 16 others.

APPENDIX V.

TIME-TABLE OF THE TRAINING COLLEGE AT KÜSNACHT, CANTON ZÜRICH.
SUMMER HALF-YEAR, 1899.

MONDAY.						TUESDAY.						WEDNESDAY.						THURSDAY.						FRIDAY.						SATURDAY.									
	Ia	Ib	IIa	IIb	III	IVa	IVb	Ia	Ib	IIa	IIb	III	IVa	IVb	Ia	Ib	IIa	IIb	III	IVa	IVb	Ia	Ib	IIa	IIb	III	IVa	IVb	Ia	Ib	IIa	IIb	III	IVa	IVb				
7-8	M	F	H	Fed	M	Sc	Sc	M	G	G	Gm	F	M	Sc	M	G	Sc	F	M	G	Ped	M	G	Sc	F	M	G	M	Ped	M	F	Ped	G	H	G	D	7-8		
8-9	D	Sc	G	M	H	F	M	F	H	M	Sc	M	G	Sc	M	F	F	G	P	H	M	G	Sc	F	Sc	G	M	Gm	Sc	M	B	M	F	Sc	D	H	8-9		
9-10	Sc	M	F	G	G	H	VD	G	M	F	Sc	Gm	Sc	M	G	Sc	VPD	H	Sc	G	H	M	Sc	M	Sc	VP	D	M	R	G	Sg	H	Sc	M	F	Ped	9-10		
10-11	G	VP	M	H	F	G	VD	H	Sc	D	M	LP	F	Gm	—	Gm	Gg	M	LVPD	Ped	H	H	—	VP	M	DL	Ped	H	G	VP	Ped	F	LD	M	R	G	Ped	M	10-11
11-12	—	Gm	VP	Lat	D	—	Gm	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11-12		
1-2	—	V	—	—	—	—	—	W	—	—	V	D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1-2			
2-3	F	V	Sc	Gm	D	M	Ped	Gg	F	Sg	G	Sc	MD	G	G	Sc	H	D	LVP	V	M	V	Gg	M	W	Ped	Sc	G	Gm	D	VP	G	Sg	Ped	Sc	2-3			
3-4	Gm	D	G	F	R	P	G	Sc	W	Gg	P	G	MD	F	Sc	MD	VP	H	Sc	Gg	Sc	Sg	Ped	D	G	Gm	VP	F	D	G	VP	F	Sc	Ped	Sc	3-4			
4-5	—	Gm	—	—	—	—	—	VP	D	W	F	D	Sc	—	G	D	—	Sg	P	Sc	Gm	R	W	—	VP	—	—	—	—	—	—	—	—	—	—	—	4-5		
5-6	E. Lat.	L	Gm	Singing in chorus.														E. Lat.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5-6			
6-7	Gm	—	—	—	—	—	—	—	—	—	E	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6-7		
G=Germany E=English F=French H=History Gg=Geography P=Piano L=Laboratory Lat=Latin M=Mathematics Sc=Natural Sciences Ped=Pedagogy and Method R=Religion W=Writing Sg=Singing Gm=Gymnastics V=Violin D=Drawing																																							

G = Germany
E = English
F = French
H = History
Gg = Geography
P = Piano
L = Laboratory
Lat = Latin
M = Mathematics
Sc = Natural Sciences
Ped = Pedagogy and Method
R = Religion
W = Writing
Sg = Singing
Gm = Gymnastics
V = Violin
D = Drawing

APPENDIX VI

NUMBER OF TEACHERS AND AVERAGE NUMBER OF SCHOLARS PER TEACHER (1897).

CANTON.	PRIMARY SCHOOLS.				HIGHER PRIMARY SCHOOLS.				Total number of Scholars in Secondary Schools.*
	Teachers.		Total number of Scholars.	Average number of Scholars per Teacher.	Teachers.		Total number of Scholars.	Average number of Scholars per Teacher.	
	Masters.	Mis- tresses.			Masters.	Mis- tresses.			
Appenzell A. Rh. -	119	—	9,749	82	23	2	542	22	72
Appenzell I. Rh. -	20	11	2,103	68	1	1	32	16	—
Aargau - - -	464	123	29,476	50	122	—	3,774	31	486
Baselland - - -	147	16	10,683	66	16	3	697	37	- -
Baselstadt - - -	89	43	8,031	61	88	30	4,563	39	2,684
Bern - - -	1,207	899	99,111	47	231	116	6,641	19	3,509
Fribourg - - -	259	222	19,994	42	28	2	633	21	597
Geneva - - -	122	162	9,365	33	12	—	227	19	1,642
Glarus - - -	93	—	5,126	55	20	—	428	21	162
Grisons - - -	430	54	14,481	30	27	2	596	21	914
Lucern - - -	275	67	21,716	63	33	5	1,118	29	630
Neuchâtel - - -	132	252	17,508	46	22	13	1,185	34	1,788
Nidwalden - - -	7	35	1,678	40	3	2	71	14	127
Obwalden - - -	11	33	2,136	49	—	1	20	20	887
Schaffhausen - - -	122	7	6,204	48	34	—	835	25	139
Schwyz - - -	58	88	7,377	51	10	3	283	22	841
Solothurn - - -	259	20	14,722	53	30	—	774	26	357
St. Gallen - - -	508	36	35,790	66	85	8	2,336	25	607
Tessin - - -	153	386	17,293	32	26	15	883	22	527
Thurgau - - -	283	13	20,995	71	39	—	1,269	33	173
Uri - - -	24	33	2,757	48	3	4	61	9	35
Valais - - -	301	261	21,054	37	4	2	90	15	471
Vaud - - -	513	501	41,162	41	10	—	161	16	2,561
Zug - - -	33	37	3,086	44	19	8	237	21	194
Zurich - - -	766	71	57,657	69	239	—	7,299	31	2,296
1896 to 1897 -	6,385	3,370	479,254	49	1,125	217	34,755	26	21,694
1895 to 1896 -	6,359	3,305	470,677	49	1,108	185	33,451	26	21,283
Difference -	+ 26	+ 65	+ 8,577	0	+ 17	+ 32	+ 1,304	0	+ 411

* In Secondary Schools the average number of Scholars per Teacher is less than 20.

APPENDIX VII.

FUNDS FOR PROVIDING PENSIONS FOR OLD AGE, FAILURE OF
HEALTH, AND FOR WIDOWS AND ORPHANS (1895).

A. OBLIGATORY FUNDS.

FUND.	Number of Members.	Number Pensioned.	Total amount of Pen- sions.	Amount of Pension or Insurance.	Annual Contribution of Teacher.	Maximum number of Payments.	Annual Contribution by State.	Capital at 1st January, 1895.
Appenzell A. Rh.								
Teachers' Pension Fund - -	135	22	Fr. 8,725	Fr. 150-600	Fr. 40	Not fixed.	Fr. 4,140	175,648
Appenzell I. Rh.								
Old Age, Widows', and Orphans' Fund.	19	—	—	—	2% of salary.	—	300	7,474
Aargau.								
Union for Pensions to Teachers -	860	218	19,583	av. 90	15	bis 35	85,000	186,435
Baselland.								
Old Age, Widows', and Orphans' Fund.	153	53	7,843	75-300	15-22½	—	—	187,260
Fund for cases of death - -	190	5	600	140	6	—	—	3,781
Fribourg.								
Old Age Fund - - - -	263	106	12,198	75-300	15	25	4,995	141,090
Geneva.								
Provident Fund for Officials of—								
a. Primary Instruction - -	301	28	40,003	1,400	80	—	12,907	401,487
b. Secondary Instruction - -	66	—	1,840	—	200	25	8,000	109,835
Glarus.								
a. Teachers' Old Age Fund - -	137	37	6,700	100-300	20	35	2,000	124,487
b. Old Age Fund for Teachers of Sewing.	36	—	—	—	min. 5	—	300	12,000
Grisons.								
Fund for Aiding Teachers - -	556	14	429½	8-63	5	—	4,410	12,453
Lucern.								
Union for assisting Teachers, Widows and Orphans.	351	189	6,713	34-48	15	20	300	118,111
Neuchâtel.								
Scholastic Provident Fund - -	563	110	25,404	720	60	30	20,000	427,715

Primary and Secondary Teachers in Switzerland. 237

A. OBLIGATORY FUNDS—continued.

FUND.	Number of Members.	Number Pensioned.	Total amount of Pensions.	Amount of Pension or Insurance.	Annual Contribution of Teacher.	Maximum number of Payments.	Annual Contribution by State.	Capital at 1st January, 1897.
Schaffhausen.			Fr.	Fr.	Fr.		Fr.	Fr.
Fund for assisting Teachers -	115	—	—	50—600	50—150	—	5,000	21,631
Schwyz.								
Old Age, Widows', and Orphans' Fund.	78	21	1,848	88	5—18	30	1,000	44,246
Solothurn.								
Old Age, Widows', and Orphans' Fund.	341	114	8,094	200—300	12	30	3,000	150,109
St. Gallen.								
a. Fund for assisting Public School Teachers.	599	200	61,216	200—600	20	Not fixed.	11,980	570,622
b. Catholic Pension Fund -	—	19	800	40	—	—	—	37,226
c. Fund for the Old Age, Widows and Orphans of Evangelical School Teachers.	—	10	250	25	—	—	—	20,122
Thurgau.								
a. Widows' and Orphans' Fund -	435	51	5,100	100	10	} —	7,000	138,398
b. Old Age and Relief Fund -	390	50	5,687	300	10—30			
Zug.								
Union for assisting Teachers -	45	4	519	120½	5	30	700	33,761
Zurich.								
a. Fund for the Widows and Orphans of Primary School Teachers.	1,028	113	35,200	200	40	Not fixed.	—	401,055
b. Fund for the Widows and Orphans of Teachers of Higher Schools and Ministers.	364	40	16,000	400	40	Not fixed.	—	192,806

B. VOLUNTARY FUNDS.

a. Cantonal Funds.

Baselstadt.								
Fund for Teachers' Widows and Orphans.	176	33	14,590	360—720	30—60	—	—	436,040
Bern.								
Teachers' Funds for—								
a. Pensions	279	—	13,950	50	Not fixed.	Till age of 56.	} —	336,822
b. Insurance	130	—	—	500—2000	accord- ing to scale.	—		

B. VOLUNTARY FUNDS—continued.*Cantonal Funds—continued.*

FUND.	Number of Members.	Number Pensioned.	Total amount of Pen- sions.	Amount of Pension or Insurance.	Annual Contribution of Teacher.	Maximum number of Payments.	Annual Contribution by State.	Capital at 1st January, 1895.
St. Gallen.			Fr.	Fr.	Fr.		Fr.	Fr.
Union for assistance in cases of death.	456	10	4,493	varies	—	—	—	1,476
Fund for Old Age, Widows, and Orphans of Secondary Teachers.	26	7	3,140	400-3000	80	—	16,500	155,567
Tessin.								
Union for assisting Teachers	138	69	3,894	—	2½-10	Not fixed.	1,000	69,842

b. Funds for Municipal, District, and Private Institutions.

Town of Aarau.								
Fund for Teachers' Pensions	33	1	400	400	¼% of salary.	—	500	53,291
District of Aarau.								
Fund for assistance in cases of death of Teachers belonging to the District Chapter.	45	—	100	100	1½	—	—	1,973
Town of Burgdorf.								
Teachers' Insurance Fund	22	—	—	—	accord- ing to scale.	—	—	35,919
District of Brugg.								
Fund for assistance in cases of death of Teachers belonging to the District Chapter.	47	—	—	—	2-3	—	—	—
Town of Lucern.								
Fund for Old Age and Failure of Health of Town School Teachers.	50	—	—	accord- ing to age.	5% of salary.	—	7,000	66,895
Town of St. Gallen.								
Fund for Old Age, Widows, and Orphans.	105	36	22,095	varies	2% of salary.	—	3% of salary.	221,275

NOTE.—The above Table is from Dr. A. Huber's *Schweizerische Schulstatistik*, Band VIII., page 644, seq., which see for fuller particulars.

THE MAIN FEATURES OF THE SCHOOL SYSTEM OF ZÜRICH.

The aim of this summary is to present in concise form the main features of the school system of Zürich. It is intended as a prelude to a much larger and more comprehensive account, the materials for which have already been collected, and which, it is hoped, will be ready for publication within the next twelve months. While any such summary must, to a great extent, partake of the nature of a category, we, nevertheless, welcome this opportunity of clearing the ground somewhat by a preliminary statement which may serve as a plain presentment of facts, the detailed discussion of which is reserved for the larger study. Compared with that of England, the school system of Zürich is a model of co-ordination, but no sacrifice of practical utility has been made to the ideal of a theoretical and rigid uniformity. The system is the logical outcome of local needs. This principle is at once apparent when the constitution, election, and relations of the various educational authorities come under consideration. Constant reference to the appended charts which have been specially prepared for this summary will materially assist towards the elucidation of the subject-matter, which naturally falls under four heads:—

- A. The kinds of Schools in Canton and Town.
- B. The Educational Authorities.
- C. The Teachers.
- D. The General Characteristics of the System.

A.—THE KINDS OF SCHOOLS IN CANTON AND TOWN.

The different schools may be classified as—

1. Kindergarten.
2. Primary School, Classes I.–VI.
3. Special Classes.
4. The Canton School (Kantonsschule).
5. The Higher Grade School (Sekundarschule).
6. Primary School, Classes VII. and VIII.
7. The Girls' High School (Höhere Töchter Schule).
8. The School of Handicrafts and Industrial Arts (Gewerbeschule).
9. Continuation Classes of all kinds.
10. Private Schools.

The relations of these schools and the precise rung of the educational ladder which they severally occupy will be best seen by tracing the progress of a child through the chart of educational possibilities annexed.

N.B.—1. The population of Zürich Canton is estimated at 400,000, that of Zürich Town (included in the foregoing estimate) at 150,000.

2. Where education is compulsory, it is gratuitous.

Kindergarten
optional.

At the age of four a child may go to one of the Kindergärten (or Kleinkinderschulen or Spielschulen). Attendance at such a school is optional, and education is free. Of these schools there are in the Canton ninety-four, of which forty-six—viz., twenty-seven public and nineteen private—are situated in Zürich Town. The total number of children in attendance at such schools throughout the Canton is 4,567.

Education
becomes
compulsory.

On the first of May following its sixth birthday, every child must be sent to school. The school may be either a public or a private school. All schools, public and private, are under Government supervision. With regard to the choice of a particular school parents' wishes are consulted so far as is possible, but the normal course is for each child to attend that public school in its own ward (Kreis) to which it is assigned by the authorities.

Medical
examination.

As soon as convenient after admission into the Primary School the pupil is subjected to a medical examination having reference to sight, hearing, and mental condition. For a child who is physically abnormal, remedial measures are adopted; a child who is adjudged mentally weak is placed in special classes (Spezialklassen für Schwachbegabte).

Primary
School,
Classes I.-VI.

For six years the child remains in the Primary School with children of either sex,* and of every social rank. This Primary School is divided into two parts—the Elementarschule (Classes I.-III.) and the Realschule † (Classes IV.-VI.).

Ordinarily a pupil remains one year in each class of the Primary School. Annual promotion is regulated by the teacher. Promotion may be withheld for one year, but the parents have the right of appeal, and, if this right is exercised, the pupil is re-examined. This sifting process exerts a most beneficial and stimulating effect on parents and pupils: the well-equipped and industrious are promoted, the idle are penalised, and undue pressure of weak children rendered impossible.†

* In the schools of the first ward (Kreis I.) alone of Zürich Town the traditional separation of the sexes still obtains. In the other wards mixed classes are the rule. The opinion of the Teachers' Associations of Zürich (Lehrerkonvente) is strongly in favour of mixed classes.

† The term "Realschule" has a totally different connotation in Switzerland from that which it bears in Germany. In Swiss schools "Realien" or "Realfächer" comprise the History of Switzerland, Geography, and Natural History.

‡ Cf. Mr. Sidney Webb in the *Daily Chronicle* for September 16th, 1901;

At the age of twelve the ways divide, and the parent may select such a course of training as the ability of his child or his own circumstances may warrant or render desirable. It is worthy of note that the parent's choice is made with full knowledge of the final and intermediate possibilities, that the necessity for the exercise of discretion is cogent, and that the teacher's task is rendered comparatively simple. A reference to the chart will show that three courses are open to a parent: he may send his son to (1) The Boys' High School (Kantonsschule or Gymnasium), or to (2) The Higher Grade School (Sekundarschule), or to (3) Classes VII. and VIII. of the Primary School.

Optional
courses at
age 12.

At one of these schools he must remain till he has reached the age of exemption, *i.e.*, until he is fourteen years old.

End of
compulsory
education.

These three schools supply the education for boys between the ages of twelve and fourteen. At the Kantonsschule the boy must learn Latin. At the Higher Grade School he must learn French. In the Primary School Classes VII. and VIII. the curriculum does not include either language.

At the age of fourteen compulsory education ceases. The possibilities open to a boy are:—

Choice of
career at
age 14.

- (i.) He may continue to attend the Gymnasium.
- (ii.) He may enter the Industrieschule and join either the Technical side or the Commercial side.
- (iii.) He may continue for another year at the Higher Grade School.
- (iv.) He may join continuation classes, which are of all kinds.
- (v.) His education may cease altogether.

In view of the two years' compulsory Latin* at the Gymnasium, boys who intend to leave school at the age of fourteen or to enter either side of the Industrieschule usually proceed by way of the Higher Grade School. However, as is often the case in our own High Schools, the Modern side is largely recruited from Classical failures.

The whole question of the co-ordination of the Primary School, Higher Grade School, and Industrieschule is under consideration, and a successful solution has only been delayed by the repeated failures to pass the Primary School Act of 1899,† which was presented seven times before ratification.

* "We must use the elementary instruction largely as a means of sifting out from the mass of class-attenders the more serious, the more persistent, the abler students, irrespective of social position."

* In view of the alternatives which might be substituted, the wisdom of a two years' course of Latin is open to grave question. *Cf.*, Mr. H. W. Eve, at the British Association, 17th September, 1901: "Too often the result is that time and energy are spent on gaining a very imperfect knowledge of Latin which might have been more profitably devoted to other subjects."

† For a translation of this Act see Appendix.

It is urged that a complete severance should be made between the Industrieschule and the Gymnasium, that the curriculum of the Industrieschule should be remodelled to begin at the end of the twelfth year, and that the Primary School pupil should thus have direct access to the Industrieschule.

Education in the Higher Grade School continues till the age of fifteen. The pupils may pass out to the Industrieschule at the age of fourteen. For pupils who do not intend to proceed to the Industrieschule the additional year is a benefit, but it is a serious handicap for those who pass into the Industrieschule at the age of fifteen.

The High School.

The Kantonsschule, or Gymnasium, represents the High School, with admission by examination. Bursaries and a number of free places ensure the possibility of professional careers to poor but deserving pupils. As has been remarked, Latin is taught from the very first; at the end of one year the curriculum includes Greek or an alternative subject. French is not introduced till the third year.

The full course at the Gymnasium will carry the pupil on to the age of 18½ years, when he may present himself for the examination which admits to the University. On an average about 60 per cent. of the boys do not take Greek. It is possible, however, to enter the classes of certain faculties at the University without a knowledge of Greek.

It must not be assumed that all pupils who pass this University entrance examination intend to enrol themselves in University classes.

The Industrieschule.

An entrance examination admits to the Industrieschule, which is fed from the Gymnasium and the Sekundarschule. This school comprises (a) a Technical side, (b) a Commercial side.

Technical Side.

a. The Technical Side (Technische Abteilung).—This prepares for the Polytechnic, a Federal institution, which imparts the highest technological instruction. French, which the Higher Grade pupil has already studied, but which is new to the Gymnasium boy, is included in the curriculum from the first. English is added at the end of the first year.

Commercial Side.

b. The Commercial Side (Handelsabteilung).—The four years' course, attested by the Leaving Certificate, is generally accepted by commercial houses as the equivalent of apprenticeship.*

The Higher Grade School (Sekundarschule).

Admission to the Higher Grade School is obtained after an entrance examination. The course is of three years' duration and includes French from the beginning. Permission to include other languages is granted by the authorities on individual representation. At the age of fourteen two courses present themselves to the pupil in the Higher Grade School: he may either pass into the Industrie-

* By a Minute of 1900 this Leaving Certificate admits to studies in Economics at the University of Zürich.

schule, or he may complete his course in the Higher Grade School, and ultimately enter the Technikum at Winterthur.

The Primary School classes VII. and VIII. have been organised since May, 1900, and replace the former Half-Timers' School (Ergänzungsschule). As a rule, these classes contain pupils who have failed to pass the entrance examination to the Higher Grade School. In 1901, of the pupils leaving Primary Class VI., 26·2 per cent. entered Primary Class VII. and 73·8 per cent. passed into the Higher Grade School, or into the Gymnasium.

Girls go through the Primary and Higher Grade Schools, the curricula being practically the same as those for boys, with the addition of needlework-classes. After completing her fifteenth year a girl may enter the Girls' High School (Höhere Töchter Schule). This school has three divisions :—

- (1) General Education (Fortbildungsklassen).
- (2) Commercial Classes (Handelsklassen).
- (3) Training College Classes for Primary School mistresses (Seminarklassen).

There are courses to train female teachers for the Kindergarten system, and special classes in Latin for those who wish to enter the University to study medicine, law, etc.

The School of Industries, where instruction is free, corresponds roughly to one of our evening schools of science and art. Employers send their apprentices to the school twice a week for the whole morning (7 a.m. to noon).

The School of Handicrafts and Industrial Arts (Gewerbeschule).

The School comprises a Preparatory course of general education and a Handicraft School. The Preparatory course extends over one year and covers the essential work of the Higher Grade School. It is open to pupils of either sex who have completed their fourteenth year. On its conclusion the pupil may enter the Handicraft School (Handwerkerschule). Here he may remain for a year or more, the extent of his stay being determined by the degree of proficiency attained. After leaving the Handicraft School three courses are open to him :—

The Preparatory course.

- (1) He may enter the Technikum at Winterthur, where he will complete his technical training ; or
- (2) He may proceed to the Industrial Art School (Kunstgewerbeschule) :

The complete course in this school occupies three full scholastic years : or

- (3) He may enter the Joiners' shop (Lehrwerkstätte für Schreiner), which is registered as a Zürich firm and trades without opposition from masters or workmen.

What is done for mechanics by the Gewerbeschule is provided in the case of commercial apprentices by the enterprise of the Swiss Merchants' Company, whose schools are subsidised by annual subventions from Canton and Town. Here again employers grant

Commercial Continuation Classes.

their apprentices leave from business hours to the extent of four hours per week, providing the apprentices make a corresponding sacrifice of their leisure. The fees are small, varying from 12 to 20 centimes per hour.

Private
schools.

In view of the Government supervision of all schools,* and also of the excellence of the provision made in public schools, private schools are few in number. Personal prejudice, religious scruples, and the necessity, in some cases, for individual instruction account for their continued existence. Of these schools there are thirteen in all, numbering 1,323 pupils. The most important are two Primary Schools numbering 503 pupils; one High School with 51 pupils; "Concordia" 147 pupils; "Erica," 131 pupils; "Wetli," 111 pupils; and Beust's school, taught on Fröbel principles, 103 pupils.

B.—THE EDUCATIONAL AUTHORITIES.

A general description of the educational authorities of Canton Zürich, and a comparison of the organisation of the other cantons in this respect, has been given by Mr. R. L. Morant in Vol. iii. of *Special Reports*, pp. 25-32.

The scope and inter-relation of these authorities will be seen by reference to the *Conspectus of Educational Authorities* (see Appendix), for the elucidation of which a brief description may be added here.

Federal
Government.

The Federal Government (Bund) is only at present directly concerned with the maintenance of the Federal Polytechnic at Zürich, and the enforcement of the general principles of education. Hence it is not represented in the *Conspectus*, which shows the administrative and consultative bodies arranged in two series of open circles at various distances from their respective centres. The correspondence is shown by the Roman numerals I, II, III., IV., which in the case of the consultative bodies are enclosed within brackets.

Administrative.

I.

Educational
Authorities
described in
Conspectus:
Constitution,
Election,
Functions.

The Council of Education (Erziehungsrat).—"The Council of Education consists of seven members including the Minister of Education† (Erziehungsdirektor). Four of these members are elected by Parliament (Der Grosse Rat), the other two by the School Synod (I), subject to confirmation by Parliament. One of

* In the case of private schools:—

- (1) Time-tables and curricula must be submitted to the Education Office for approval.
- (2) The teaching is subject to inspection.
- (3) The buildings must be examined and approved by the Board of Health.

† The Minister of Education is a member of the Cabinet (Regierungsrat). It should be observed that the members of the Cabinet are elected by popular vote; their respective functions are determined by subsequent arrangement,

these members must be a teacher at a place of higher instruction, and the other is chosen from the Elementary (including Higher Grade) teachers." Section 2, Act of 23 December, 1859.

Attached to the Council of Education is the Education Office (Erziehungsdirektion), which consists of the Minister and the permanent officials.

The functions of the Council of Education are generally defined* Council of Education by Art. 70 of the Cantonal Constitution as: "The supervision of all school authorities and the promotion of advanced and elementary education."

Under this definition their duties are:—

- (1) To nominate Boards of Supervision for each Secondary School.
- (2) To receive and register annual reports from all lower authorities.
- (3) To exercise a general control over teachers and to grant certificates.
- (4) To draft bills and to make bye-laws.

II.

The Constitution and Election of the District School Boards are thus defined in Art. 15 of the Act of 23 Dec., 1859. The District School Boards, (Bezirksschulpfleg-Comité) Election, Function

"Every District has a District School Board of at least nine members. The Cabinet determines the exact number according to the needs of the District." [The numbers of the members in the School Boards of the various Districts are shown in the Conspectus.]

"Three members are elected by the teachers of the District; the other members are chosen by the General Assembly of the District (Bezirksversammlung)."

The election takes place every three years.

The functions of the District School Boards are generally defined by Art. 20 of the Act of 23 Dec., 1859, as "The supervision of educational matters in the district." Under this definition their duties are:—

- (1) To carry out such regulations as may from time to time be issued by the Council.
- (2) To arrange for the visitation of each school in the District twice annually by one of their members, who also presides at the annual examination of the School.†

* For details see Sections 33, 34 of the Act of 26th February, 1899.

† After the examination the presiding member confers with the local authorities and sends a written Report to the District School Board. On completion of the examinations a meeting of the Board is held to discuss the results. The Secretary sends a note of the Minutes to the Ward or Communal School Board, and to the teachers concerned. Every year a summary, with schedules, is sent by the Board to the Council of Education. Every fifth year a comprehensive report is made so that the Council can review the situation.

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[The services of the Board are gratuitous, but each member receives three francs a day towards defraying expenses actually incurred when paying school visits.]

III.

The Constitution and Election of the Higher Grade School Boards are thus defined in Art. 26 of the Act of 23 Dec., 1859 :—

The Higher
Grade School
Boards
(Sekundar-
schulpflegen):
Constitution,
Election,
Functions.

“Every Higher Grade Ward (Sekundarschulkreis) has a School Board of from seven to eleven members. The District School Board determines the exact number according to the needs of the ward.” [The number of the School Boards in the various districts is shown in the Conspectus.]

The meetings of the Board are attended by the teachers for purposes of consultation.

The members of the Board are elected by the voters of the ward (Sekundarschulkreis) for a period of three years.

The functions of the Higher Grade School Boards are generally defined by Art. 37 of the Act of 23 Dec., 1859 :—

“The School Board is entrusted with the immediate supervision of the Schools of the Ward and the administration of these schools under the provisions of the Education Act.”

The members of the Higher Grade School Boards are expected to visit the schools under their charge at least twice in the year, and to satisfy themselves by personal observation that the provisions of the Act are being carried out in all respects. They are also responsible for the payment of salaries.

IV.

The Parish
School
Boards
(Gemeinde-
schulpflegen):
Constitution,
Election,
Functions.

[The word Parish is used as the equivalent both of (Primar) Schulkreis and (Primar) Schulgemeinde.]

At the outset it must be observed that—

- (1) The Sekundarschulkreis usually contains more than one Primarschulkreis :—
- (2) The Sekundarschulkreis authorities and the Primarschulkreis authorities are distinct, even if their areas coincide.

The Constitution and Election of Primary School Boards are thus defined in Art. 32 of the Act of 23 December, 1859 :—

“Every parish has a School Board of at least five members. The exact number is determined by the parish.” [The number of Parish School Boards in the various Districts is shown in the Conspectus.]

The members of the Board are elected by the voters of the parish for a period of three years.

The functions of the Parish School Boards in regard to Primary

Education are identical with those of the Higher Grade Board in regard to Higher Grade Education.

The possible relations of Primarschulkreis and Primarschulgemeinde and their respective authorities may be summarised as follows:—

- (1) The Primarschulkreis and the Primarschulgemeinde may be identical; or,
- (2) The Primarschulkreis may include several Gemeinden; or,
- (3) The Primarschulgemeinde may comprise areas situated in different Kreise*; or,
- (4) Where several political communes belong to one ecclesiastical parish, each commune is entitled to form an independent Kreis and choose its own School Board.† Section 5 of Act of 11 June, 1899, q.v.

In Zürich Canton there are 11 Districts (Bezirke), 96 Higher Grade Wards (Sekundarschulkreise), 179 Primary School Parishes (Schulkreise), and 352 Primary School Communes (Schulgemeinden).

Consultative.

Corresponding to the administrative bodies already described are the consultative assemblies of teachers.

(I.)

The Council of the Teachers' Synod (*vide infra*) consists of the President of the Synod, eleven members representing the eleven Districts (Bezirke), and four members representing the University, the Gymnasium, the Industrieschule, and the Secondary Schools of Winterthur.

The Council of the Synod prepares the agenda for the annual meeting.

(II.)

All the resident teachers and probationers of the Primary and Higher Grade Schools in a district form the School Chapter of the district. They hold meetings for the exchange of ideas on the theory and practice of education. They send to the Council of Education an expression of opinion on the curriculum, on the introduction of new school books and materials, and on important regulations affecting the inner working of the school.

Each Chapter sends a representative to the Council of the Synod

* This becomes intelligible where the Primarschulgemeinde is contemporaneous with an old ecclesiastical parish.

† This provision is only explicable on the ground that "Kreis" is used in a restricted and also in a generic sense—*cf.*, English "quarter."

and elects the teachers' representatives on the District School Board. It also sends an annual report of its proceedings to the Council of Education.

The numbers of members of the various Chapters are shown in the Conspectus.

There are no other official organisations of Higher Grade or Primary teachers. These teachers are elected by popular vote, and the numbers in the respective districts are indicated in (III.) and (IV.) of the Conspectus.

The Synod

The Synod includes all teachers of every grade of school, Secondary Schools and University included. The Synod meets, as a rule, once a year to hear an address delivered by some recognised educational authority. It discusses the agenda prepared by the Council of the Synod, and submits the results to the authorities. It also receives and discusses the annual Report made by the Council of Education to the Cabinet.

Secondary Education.

Administrative.

The authorities concerned with Secondary Education are represented in the Conspectus by two parallelograms, of which one includes the Administrative Boards and the other the Consultative Assemblies. Each Secondary School is controlled by a Board of Supervision. Under the provisions of the new Bill relating to Secondary Education a Board of Supervision consists of :—

- (1) The Minister of Education as President.
- (2) The Rector and Pro-Rector of the school.
- (3) From five to seven members elected by the Cabinet.

Their functions as defined in Section 52 of the same Bill comprise the general supervision and inspection of the whole school. They report from time to time to the Council of Education.

Lehrer-konvente.

The masters of each Secondary School constitute a Konvent. These Konvente occupy the same position in Secondary as that filled by the Chapters in regard to Primary and Higher Grade education.

The Town of Zürich.

For the purposes of Primary and Higher Grade education the Town is divided into five wards (" Kreise "), which are identical with the political wards. Each ward has its own School-board (" Kreisschulpflege "); these bodies number :—

Ward i.	30	members.
„ ii.	17	„
„ iii.	34	„
„ iv.	21	„
„ v.	34	„

Each ward has also a Consultative Women's Committee.

The Ward School Boards are responsible and report to a Central Board of twenty-five members (" Zentralschulpflege ").

On an average one-third of the members of these bodies are teachers.

A proposal has been made by the Corporation to abolish these authorities, and to substitute one local authority controlling

Primary and Higher Grade education in the Town. The proposal has received the approval of the Council of Education, and awaits legislative ratification.

The Secondary and Technical institutions of the Town are controlled by Boards of Supervision (*vide supra*). Three of these boards—namely, those controlling the Girls' High School (Höhere Töchter Schule), the Technical School (Gewerbeschule), and the private schools—report to the Zentralschulpflege. Secondary Education

C.—TEACHERS.

(a) Primary Teachers (*Primarlehrer*).

A Primary teacher's training begins in the training college (Seminarklassen), to enter which the candidate must have attained the age of fifteen years. The candidate must have passed through the full Higher Grade course or its equivalent. Teachers

The course extends over four years, at the end of which there is an examination in the theory and practice of teaching. On the results of this examination a certificate is granted by the Board of Education.

Attendance at a training college is not essential, nor is such attendance necessary, in order to obtain the certificate; the examination is open to candidates otherwise prepared.

A certificated teacher does not receive definite appointment for two years. During this time he occupies the position of (a) a provisional or (b) a temporary teacher.*

The salaries of Primary teachers vary in amount between £60 and £140 per annum. This estimate includes the value of the house, garden, etc., supplied by the Commune, and various supplementary payments from Commune and Canton. The nature of these payments and their incidence is explained in Section IV. of the Act (see Appendix).

The appointment of Primary teachers is made by the Communal Assembly (*Gemeindeversammlung*) on the recommendation of the Board. Appoint-ment.

In Primary and Higher Grade Schools there is no headmaster or headmistress *de jure* or *de facto*. The duties of acting representative (*Hausvorstand*), discharged by one of the staff, are simply those entailed by the transaction of official correspondence. Headmas

(b) Higher Grade Teachers (*Sekundarlehrer*).

In addition to all the qualifications of the Primary School teacher, the Higher Grade teacher must have satisfied the following requirements:—

(i.) He must have taught for one year in a Primary School.

* Provisional—*i.e.*, holding office till a definite vacancy is definitely filled; Temporary—acting as *locum tenens*.

- (ii.) He must have studied for two years at the University
- (iii.) He must have passed the examination and have obtained the certificate prescribed for Higher Grade teachers.

Salary. The salary of a Higher Grade teacher varies from £75 to £200 per annum, according to length of service and other considerations.

Appointment. The appointment is made by the voters of the Ward after a ballot has been taken.

(c) *Secondary Teachers.*

There is, at present, no definite course of training prescribed for Secondary teachers. When a vacancy occurs, appointment is made by the particular Board of Supervision from candidates who can show academic distinction and experience in the practical work of teaching, or who have achieved distinction as Higher Grade teachers.

Salary. Salaries vary from £160 to £300 a year.

Headmaster. The headmaster (Rektor) is chosen from the staff. He serves for a period of three years and may be re-elected. A Prorektor is elected in like manner.

D.—GENERAL CHARACTERISTICS.

A consideration of the various educational authorities shows that the principle of decentralisation has been pushed to its utmost limits. The reaction is evident in the proposal to substitute one central authority for the Town in place of the existing Ward School Boards and Central Committee. That the multiplicity of authorities and the absence of any direct central control have not seriously affected the consistency of the teaching is due rather to the high standard of public spirit and intelligence than to any inherent merits of the system. (In Great Britain perhaps the best parallel to the national attitude of the Swiss in regard to educational problems is supplied by Scotland, where the questions of denominational teaching and of the co-ordination of all classes of schools under one local authority long since received satisfactory solutions, at any rate in the cities and larger towns.) But it cannot be doubted that such direct central control, with official inspection of Primary and Secondary Schools, would materially conduce to the success of their working, and that in all grades of school the presence of a responsible headmaster is desirable. Whilst amongst the teachers themselves there is no unanimity on these points, the general trend of opinion is shown by the recent appointment of inspectors for the classes of Handicrafts and Industrial Arts ("Gewerbe-klassen") and of Needlework ("Arbeit-klassen").

It has been said with truth that "Zürich city is perhaps the chief centre of Swiss Socialistic developments." In face of this statement the signal failure of the Socialist candidates at the recent municipal elections seems strange, till we observe that some of the fundamental doctrines of Socialism have been generally accepted

and have resulted in the widest recognition of State responsibility. Exemplifications of Collectivist tendencies in educational administration are afforded by—

- (i.) The establishment of homes in the mountains for weak or anæmic school children ("Erholungsstationen").
- (ii.) The system of Holiday Camps ("Ferien Kolonien").
- (iii.) The provision of free meals and clothing for the necessitous. (This provision includes even tram-tickets and spectacles.)
- (iv.) The removal of their children from the custody of known thieves and habitual drunkards.

The universal acquiescence in these developments is evidenced by the fact that, whilst their cost is primarily defrayed by cantonal and municipal contributions, there is a large margin of expense in connection with these institutions which is readily met by voluntary subscription. The growing feeling against the free education of the children of aliens, who, in rapidly-increasing numbers, repair to Zürich as the Bedford of Switzerland, is intelligible, and not in any way indicative of a retrogressive policy.

In regard to the general scheme of education, it must be observed that the whole scheme, with its possibilities, intermediate and final, is perfectly familiar to every parent. This familiarity is due to two causes—

- (i.) The local control of each school ;
- (ii.) The necessity for the exercise of choice at various stages of the pupil's progress.

The School Report ("Schulzeugniss"), presented quarterly to parents for signature, gives full information as to the child's powers and progress, of which no parent is *allowed* to be ignorant. Failure or incapacity at any stage is registered automatically. No parent can live in a fool's paradise : no child can drift. By a process of natural selection, pupils are differentiated according to ability : the right calling or profession is chosen : the chances of misdirection are minimised : unsuitable aspirants are painlessly eliminated at an early age, so that the avenues are not blocked by incompetents. Switzerland is the land of the Ladder—and of the Sieve !

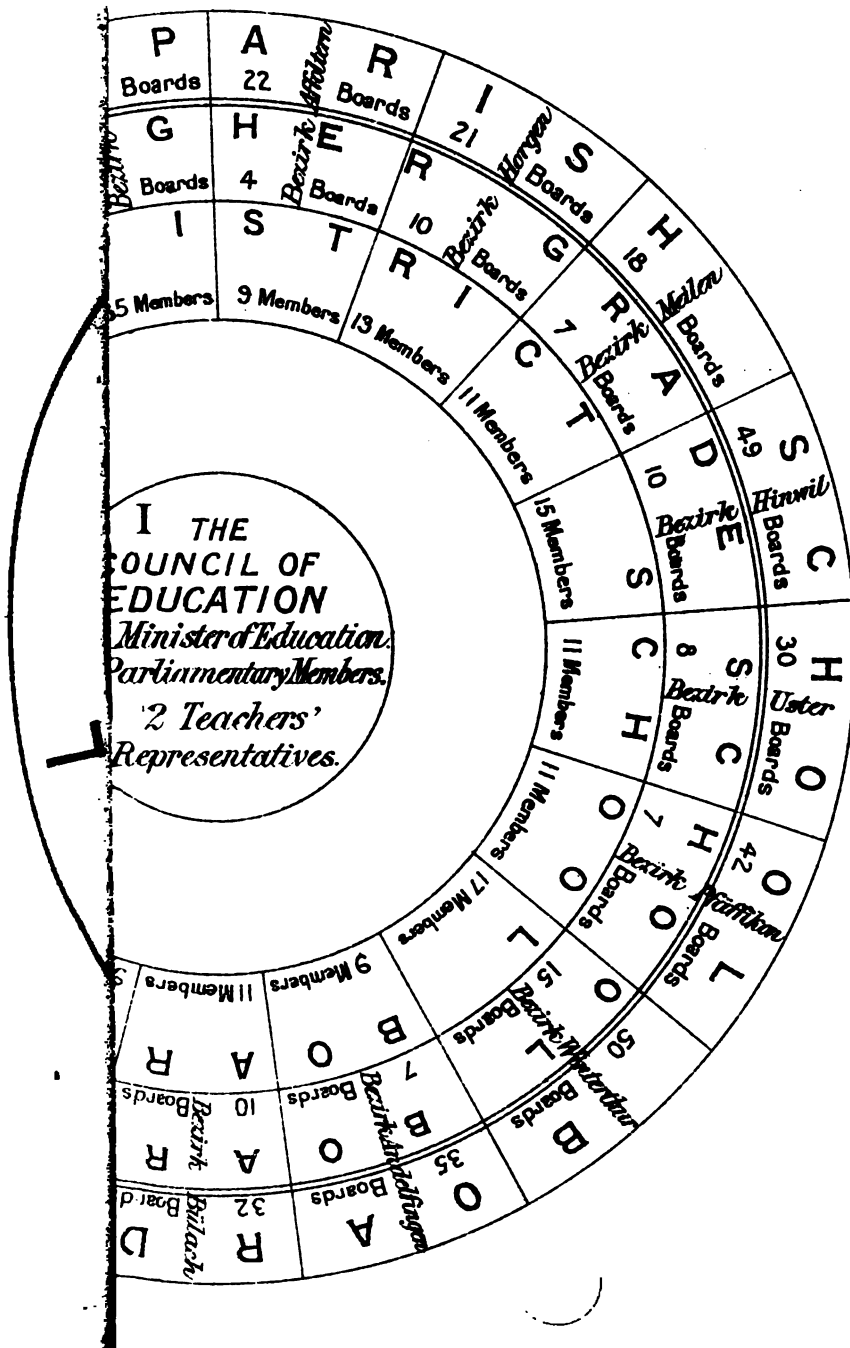
H. J. SPENSER.

A. J. PRESSLAND.

6-7	Primarschule I.	Compulsory and Gratuitous.	2818 pupils.	} These three Classes are called the "Elementar-schule."	} These three Classes are called the "Realschule."	} Special Classes for weak-minded children.
7-8	" II.	"	2328			
8-9	" III.	"	2312			
9-10	Primarschule IV.	Compulsory and Gratuitous.	2207 pupils.			
10-11	" V.	"	1991	} These three Classes are called the "Realschule."	} Practising School, Training College, 61 pupils, age 6-12	} Special Classes for weak-minded children.
11-12	" VI.	"	1781			
12-13	Kantonsschule.					
13-14	Gymnasium I.					
14-15	Gymnasium II.					
15-16	Gymnasium III.					
16-17	Gymnasium IV.					
17-18	Gymnasium V.					
18-19	Gymnasium VI.					
19-20	Gymnasium VII.					
20-21	Gymnasium VIII.					
21-22	Gymnasium IX.					
22-23	Gymnasium X.					
23-24	Gymnasium XI.					
24-25	Gymnasium XII.					
25-26	Gymnasium XIII.					
26-27	Gymnasium XIV.					
27-28	Gymnasium XV.					
28-29	Gymnasium XVI.					
29-30	Gymnasium XVII.					
30-31	Gymnasium XVIII.					
31-32	Gymnasium XIX.					
32-33	Gymnasium XX.					
33-34	Gymnasium XXI.					
34-35	Gymnasium XXII.					
35-36	Gymnasium XXIII.					
36-37	Gymnasium XXIV.					
37-38	Gymnasium XXV.					
38-39	Gymnasium XXVI.					
39-40	Gymnasium XXVII.					
40-41	Gymnasium XXVIII.					
41-42	Gymnasium XXIX.					
42-43	Gymnasium XXX.					
43-44	Gymnasium XXXI.					
44-45	Gymnasium XXXII.					
45-46	Gymnasium XXXIII.					
46-47	Gymnasium XXXIV.					
47-48	Gymnasium XXXV.					
48-49	Gymnasium XXXVI.					
49-50	Gymnasium XXXVII.					
50-51	Gymnasium XXXVIII.					
51-52	Gymnasium XXXIX.					
52-53	Gymnasium XL.					
53-54	Gymnasium XLI.					
54-55	Gymnasium XLII.					
55-56	Gymnasium XLIII.					
56-57	Gymnasium XLIV.					
57-58	Gymnasium XLV.					
58-59	Gymnasium XLVI.					
59-60	Gymnasium XLVII.					
60-61	Gymnasium XLVIII.					
61-62	Gymnasium XLIX.					
62-63	Gymnasium L.					
63-64	Gymnasium LI.					
64-65	Gymnasium LII.					
65-66	Gymnasium LIII.					
66-67	Gymnasium LIV.					
67-68	Gymnasium LV.					
68-69	Gymnasium LVI.					
69-70	Gymnasium LVII.					
70-71	Gymnasium LVIII.					
71-72	Gymnasium LIX.					
72-73	Gymnasium LX.					
73-74	Gymnasium LXI.					
74-75	Gymnasium LXII.					
75-76	Gymnasium LXIII.					
76-77	Gymnasium LXIV.					
77-78	Gymnasium LXV.					
78-79	Gymnasium LXVI.					
79-80	Gymnasium LXVII.					
80-81	Gymnasium LXVIII.					
81-82	Gymnasium LXIX.					
82-83	Gymnasium LXX.					
83-84	Gymnasium LXXI.					
84-85	Gymnasium LXXII.					
85-86	Gymnasium LXXIII.					
86-87	Gymnasium LXXIV.					
87-88	Gymnasium LXXV.					
88-89	Gymnasium LXXVI.					
89-90	Gymnasium LXXVII.					
90-91	Gymnasium LXXVIII.					
91-92	Gymnasium LXXIX.					
92-93	Gymnasium LXXX.					

Secondary Education is provided at Winterthur for 200 pupils; 126 in the Gymnasium, 45 in the Industrieschule, and 38 in the Höhere Mädchen Schule.

ADMINISTRATIVE.



APPENDIX.

CANTON OF ZÜRICH, PUBLIC SCHOOL ACT (VOLKSSCHULGESETZ), 1899.

SECTION I.

GENERAL.

[NOTE.—*The meanings of the German Proper Names used in this translation have been explained in the text. It will suffice here to note that the Erziehungsrat is translated "Council of Education," the Regierungsrat "Cabinet," and the Erziehungsdirektion "Board of Education."*]

1. The public schools (Volksschulen) of Canton Zürich include the following :—(a) The Primarschule ; (b) the Sekundarschule.
2. Education is free.
3. No public schools may exist in the Canton which are founded on a sectarian basis.
4. For the organisation of education in the town of Zürich the powers contained in bye-laws are unaffected by this Act.

SECTION II.

PRIMARSCHULE (PRIMARY SCHOOL).

(1) *School Wards and School Communes.*

5. The school wards (Schulkreise), which, as a rule, coincide with the ecclesiastical parishes, consist of one or more school communes (Schulgemeinden).

Where several political communes belong to one ecclesiastical parish, each of them is entitled to form an independent school ward and to choose a separate school board (Schulpflege).

6. For meetings of school wards and school communes the same regulations hold good as for meetings of the commune.

7. Every school commune must have its own school buildings. The Erziehungsrat is empowered to make exceptions in extraordinary cases.

8. The use of school buildings for other than educational purposes may be granted by the school board.

9. The Erziehungsrat shall issue instructions regarding the erection, furnishing, repair, cleaning, and use of school buildings.

(2) *Attendance.*

10. All children living in the canton, who, on the last day of April, have passed their sixth birthday, must enter the public school at the beginning of that year's session.

Children who have not reached this age shall not be received.

The attendance of children who are physically or mentally weak may be deferred by the school board for a longer or shorter period. Such children may be separately classified.

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11. Children whose presence is detrimental to the instruction shall be excluded from school on the production of an official medical certificate of mental feebleness or physical affliction. So far as is possible, special arrangements shall be made for these children.

12. When children of school age do not attend the school corresponding to their domicile, but attend another public school, or are privately educated, the parents or guardians shall notify this to the school board. The same obligation rests on the principals of private schools.

The school board shall ascertain that children of school age who do not attend the public school receive instruction in accordance with the requirements of the primary school.

13. The new session begins, and the regular enrolment of new pupils takes place at the beginning of May.

Before the opening of the session the registrar-general shall send to the school board a correct list of the children who reach school age, with date of their birth, and their parents' name, domicile, and residence.

14. School attendance lasts for eight years—that is, till the end of the session in which the pupil attains his fourteenth year.

By resolution of the school board instruction in the seventh and eighth classes may in summer be limited to eight hours per week: such instruction shall be given on two mornings in the week. In this case the winter term must embrace at least twenty-three weeks.

15. The Primarschule is divided into eight classes, corresponding to the ages of the pupils.

16. Children of not more than six different stages of advancement may work under the direction of one master at the same time.

17. When in a school, or a division, the number of children to be taught simultaneously has reached seventy for the third consecutive year, an additional master must be appointed.*

A school commune which contains less than seventy pupils for a master receives the usual cantonal contribution (without deduction) towards the master's salary.

18. The consent of the Erziehungsrat must be obtained before a school may be divided.

The decision as to the mode of employment of a teacher in a divided school rests with the communal school board. The wishes of teachers already in office shall receive due consideration. In case of disagreement the final decision rests with the Erziehungsrat.

19. The hours of work allotted weekly to the various classes are as follows:—

Class I.	-	-	-	-	-	-	-	-	15 to 20 hours.
Class II.	-	-	-	-	-	-	-	-	18 to 22 „
Class III.	-	-	-	-	-	-	-	-	20 to 23 „
Classes IV., V., VI.	-	-	-	-	-	-	-	-	24 to 30 „
Classes VII. and VIII.	-	-	-	-	-	-	-	-	27 to 33 „

20. The gymnastic and hand-work hours are not to be counted in the eight hours' teaching which children receive under Section 14 in summer.

21. With the exception of hand-work classes, no lessons may be given on Saturday afternoon.

22. The school holidays amount to nine weeks in the year; these include the interval between the sessions. The distribution of the holidays is made by the school board, who must report to the district school board (Bezirksschulpflege). In determining the holidays attention must be paid to local requirements, e.g., harvest time, vintage.

* Such a school is called a "Divided School" (Getrennte Schule).

(3) *Instruction.*

23. The subjects of instruction in the primary school are:—

Biblical history and morals.

German.

Arithmetic and geometry.

Naturkunde, *i.e.*, Geography and History, especially that of the mother country.

Writing, drawing, and singing.

Gymnastics.

Hand-work and domestic economy for girls.

24. A curriculum drawn up by the Erziehungsrat determines for each class the subjects of instruction, and the time to be devoted to them.

The children shall receive a thorough elementary education, especially in language and arithmetic, and must exhibit proficiency in penmanship, especially in German character.

In the upper classes, over and above the demands of general education, the needs of practical life shall receive due consideration.

25. The school board shall draw up the time-table with the help of the master. The order in which the subjects are taken for each day and hour is determined by the time-table, which must receive the approval of the district school board.

A master cannot be required to teach for more than thirty-six hours a week, gymnastic lessons included.

26. Instruction in Biblical history and morals shall be given by the master during the first six school years: the instruction must be of such a character that pupils of different sects can attend without detriment to freedom of conscience.

Art. 49 of the Federal Constitution and Art. 63 of the Cantonal Constitution shall regulate attendance at this instruction.

27. Instruction in Biblical history and morals is given in the seventh and eighth school years, as a rule, by the clergy of the parish.

When a parish includes several schools, the instruction may be spread over different days of the week, or the pupils from neighbouring schools may be brought together to receive such instruction.

When this order cannot be carried out by reason of the number of schools, this instruction may be given by a minister from a neighbouring parish, or by a master, with due remuneration. Such arrangements require the approval of the district school board.

The time for other instruction is not to be lessened in order to allow pupils to assemble for this (Biblical) instruction.

28. The curriculum and the books to be used for the seventh and eighth classes in Biblical history and morals shall be laid before the church council (Kirchenrat) for approval.

29. On application from any considerable sectarian minority the school board may place the school buildings at the disposal of such minority for religious instruction out of school hours. No payment is required. In cases of appeal the Regierungsrat shall decide.

30. The school communes are bound to provide the premises and apparatus necessary for gymnastic exercises.

31. The gymnastic instruction for boys shall conform to federal provisions.

32. The school commune may, with the approval of the Erziehungsrat, provide instruction in hand-work (cardboard, carpentry, etc.) in the upper classes of the Primarschule. Attendance is voluntary. The Canton will contribute towards defraying extraordinary expenses.

(4) *Hand-work for Girls.*

33. The object of the hand-work classes is to encourage knitting, sewing, darning, and mending, and the making of simple garments, and to afford a general training in order, cleanliness, and housewifery.

The course is spread over five years (from the fourth to the eighth) of the Volksschule. Attendance is compulsory.

School communes may arrange for this work to begin in the third class.

34. In the fourth class, and in classes up to the eighth, from four to six hours a week shall be devoted to instruction. In the third class, four hours at most may be given.

35. If the number of pupils in a class exceed thirty, and it should appear that it will continue to exceed that number, a second division shall be formed.

If the number of pupils be less than six, and it should appear that it will remain below that number, the Erziehungsrat may combine the school with a neighbouring one, in which case expenses will be divided *per capita* between the school communes.

36. For every work school (Arbeitschule) the school board shall choose a women's committee. All questions relating to the school are to come before the committee for approval and suggestion. Beyond this, the immediate supervision of the instruction and the purchase of suitable and uniform material are entrusted to the committee. The necessary materials are given free to the pupils by the school communes.

37. In every district one or more inspectresses shall be chosen by the district school board. They shall visit each school twice a year at least, and shall send reports to the district school board through the communal school board, *i.e.*, through its women's committee.

In addition the Erziehungsrat nominates a cantonal inspectress, who shall visit the schools of the canton as required, and conduct the courses for the teachers of this subject.

38. The Erziehungsrat organises from time to time special courses for the education of hand-work teachers, and a women's committee is chosen for purposes of supervision.

The curriculum is determined by the Erziehungsrat.

39. At the end of every course an examination is held, and certificates of proficiency are awarded by the Erziehungsdirektion. Persons who have received instruction elsewhere may also be admitted as candidates.

A rescript from the Erziehungsrat will settle the details of these examinations.

40. The appointment of hand-work teachers is made by the communal school board on the recommendation of the women's committee. Teachers are appointed provisionally for one year, or definitely for six years.

Only teachers who possess a certificate of proficiency (Section 39) are eligible for appointment.

The same teacher may be engaged at several schools.

41. The minimum payment of a teacher is 40 francs per annum for each hour per week. After five years' service an increase of five francs is made, and so on for every five years up to twenty years of service.

The rules relating to pensions for teachers shall apply to the hand-work teachers also.

(5) *Teaching Material (Lehrmittel).*

42. The teaching material in the Volksschule is selected by the Erziehungsrat under the reservations in Section 28. It must conform to a comprehensive plan, which embraces all classes and applies to all teaching accessories.

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The Erziehungsrat determines the material required by each pupil for the completion of the curriculum, and, so far as is possible, that required by the class.

The Canton itself undertakes the publication of all necessary material.

With regard to the preparation of new text-books open competition will, as a rule, be instituted.

43. The Erziehungsrat appoints from time to time a committee of experts to examine and approve of new works or new editions.

New books shall be used on probation for three years, and on approval by the masters (Lehrerschaft) shall be definitely introduced.

44. Books, class material and school furniture shall be provided by the communes without charge to the pupils.

(6) *Organisation.*

45. At the end of the session a public examination is held in each school in the presence of the school board, under the supervision and direction of a member of the district school board.

46. The school board decides the promotion of pupils on the recommendation of the teacher.

Pupils who cannot keep pace with the instruction may, on the proposal of the master, be detained in their classes at the end of the school year. In exceptional cases they may be sent down to a lower class during the year.

No pupil may remain for more than two years in the same class.

Pupils whose promotion has been deferred on account of unsatisfactory progress may be released from attendance at the end of nine years.

47. The school authorities and teachers shall enforce the regular attendance of pupils who are of school age.

The Gemeinderatskanzlei (i.e. office of the commune) shall send, without delay, to the school board the names of all children of school age whose parents move into his parish.

48. The school authorities and teachers shall guard against the possibility of pupils being overworked or neglected out of school hours. When warnings are of no avail, recourse must be had to the guardians (Vormundschaftsbehörde), who will act according to statute.

49. Parents, foster-parents, guardians, and employers who persistently neglect their duties in regard to children of school age shall be fined by the school board up to a maximum of fifteen francs.

In bad cases a summons shall issue on the grounds that parental duties have been neglected or official orders disobeyed.

50. The school board shall appeal to the guardians, as in Section 48, in the case of morally abandoned and destitute children. Such children may be sent to educational or correctional institutions, or boarded with a suitable family. The costs shall be met by the parents, and are recoverable from their assets. Where assets are wanting, the cost falls on the canton, the amount being recoverable from the commune.

In pressing cases the school board is authorised to proceed without delay.

51. Cantonal contributions are made towards the expenses which figure in the school budget on account of the care of needy children. In like manner the canton may support weakly children during attendance at holiday colonies.

52. The Regierungsrat will institute occasional medical examinations of children and inspections of school buildings.

Further particulars will be given in bye-laws.

53. The Erziehungsrat will issue instructions on discipline and order in the schools, the observance of the legal hours, the proper amount of homework, and the treatment of absentees.

They determine also how far these instructions apply to private schools.

SECTION III.

SEKUNDARSCHULE (HIGHER GRADE BOARD SCHOOL).

(1) *General.*

54. The object of the Sekundarschule is to consolidate and to develop the matter learnt in the Primarschule, and to facilitate the progress of pupils to higher teaching institutions.

55. The Sekundarschule course begins after six years' attendance at the Primarschule, and continues for three years.

The Schulkreis (school ward) may organise a longer and more extensive curriculum, with the approval of the Erziehungsrat. The canton contributes towards the extra expenses so incurred. In the allocation of this contribution allowance shall be made for the attendance of pupils from other secondary school wards.

56. The number of pupils shall not exceed thirty-five for each master. If this number be exceeded for three consecutive years, another master shall be engaged.

57. A master may not be engaged to give more than thirty-five lessons a week.

The division of the teaching between two or more masters and the transfer of single subjects to special masters (Fachlehrer) is arranged by the Sekundarschulpflege (higher grade school board), with the approval of the district school board.—The wishes of teachers already in office shall receive due consideration. In case of dispute the final decision rests with the Erziehungsrat.

58. The regulations of this Act regarding schoolbuildings (Sections 7-9), the beginning of the school session (Section 13), the time of instruction (Sections 21, 22), the curriculum and time-table (Sections 24, 25), gymnastic instruction (Section 31), and organisation (Sections 45-53) in the primary schools apply also in corresponding manner to the Sekundarschule.

59. The canton and the secondary school-ward (Sekundarschulkreis) will give bursaries to necessitous and deserving children. In the award those pupils who live far from school and those who attend the third class shall receive special consideration.

(2) *School Wards.*

60. The canton is divided into Sekundarschulkreise (higher grade board school wards). On the recommendation of the district school board and of the Erziehungsrat the Regierungsrat will determine the boundaries of the wards and the positions of the schools.

The powers of the Sekundarschulkreisgemeinde (higher grade school commune) are determined by the Act of May 19th, 1878.

61. The approval of the Regierungsrat is necessary for the erection of new higher grade schools. This approval cannot be refused when the financial position of the school is sound, and when at least fifteen pupils are likely to be in attendance for the next three years.

62. If the number of pupils sink below ten for a period of five years, the school may be dissolved by the Regierungsrat. In this case the measures

necessary for the redistribution of the parishes which constituted the former ward and the disposal of school plant shall be taken simultaneously. In the disposal of assets regard shall be had to a possible reopening of the school.

Such dissolution shall ordinarily take place on the expiration of the teacher's period of office. If an exception be made, and the teacher be unable to find employment elsewhere, he shall receive, from ward and canton, his full pay up to the end of his period of office.

(3) Admission and Attendance of Pupils.

63. Attendance at the Sekundarschule is open to all boys and girls living in the ward who have attained the standard of the sixth primary class.

The consent of the higher grade school board is necessary for the admission of pupils living in other school wards. Section 55 remains unaffected by this clause.

64. Formal admission of new pupils at the beginning of each session is deferred for four weeks. At the end of this time the teacher reports to the board what pupils are competent for admission. Before finally deciding the board may hold an examination.

65. The usual time for leaving the Sekundarschule is the end of the school year.

Pupils who leave before the end of the second school year are bound to attend the corresponding primary school classes until the end of the compulsory period of school attendance is reached.

66. Pupils guilty of persistent idleness or bad conduct may be removed from the school by the Higher Grade School Board.

(4) Instruction and Teaching Materials.

67. The subjects of instruction in the Sekundarschule are:—

- Biblical history and morals.
- German and French.
- Arithmetic, elements of calculation and book-keeping.
- Geometry, with measurements and drawing.
- Naturkunde (natural history).
- History.
- Geography.
- Writing, drawing, and singing.
- Gymnastics.
- Hand-work and housekeeping for girls.

68. Attendance at all subjects, except Biblical history and morals, is compulsory for all pupils. The board may, however, grant dispensation from single subjects in particular cases.

69. The hours devoted to obligatory subjects in the first and second classes shall not exceed thirty-four per week.

70. Instruction in Biblical history and morals will, ordinarily, be given by one of the clergy of the Canton.

The curriculum and books will be settled by the Erziehungsrat, after consultation with the Kirchenrat (Church Council).

71. The hand-work for girls occupies from four to six hours per week. The School Board may release them from attendance at other subjects up to a maximum of four hours per week.

When there are fewer than six girls at a Sekundarschule, a special work school (Arbeitschule) for girls need not be formed, if suitable provision can be made by amalgamation with a Primarschule.

72. By resolution of the higher grade school commune, instruction in hand-work for boys can, in case of need, be given in common with pupils of the Primarschule. The resolution requires approval by the Erziehungsrat. Attendance is optional. The Canton contributes towards the special expenses of this instruction.

73. With the approval of the Erziehungsrat, instruction in other languages, ancient or modern, may be given, but not before the third class is reached. Attendance is optional. The Canton gives a proportional contribution towards expenses.

74. All teaching materials must be approved of by the Erziehungsrat before introduction. If a new work for the Sekundarschule be issued by the cantonal publishing house (Verlag) the provisions of Sections 42 and 43 still hold good.

The material for the pupils' use, as well as class material recommended by the Erziehungsrat, and the school furniture, shall be provided by the Sekundarschulkreisgemeinde without charge.

SECTION IV.

THE CANTONAL CONTRIBUTIONS.

75. The Canton undertakes to furnish two-thirds of the legal salary of Primary and Higher Grade teachers. Towards the other one-third it contributes according to the total taxation and the taxable capacity of the commune or ward during the last five years. For this purpose the Regierungsrat will make a classification of communes; no class will receive the full contribution of one third, nor will any class be passed over.

If a commune, or a ward, raise the pay of a master, the Canton will contribute towards this until the salary reaches 1,800 in Primary and 2,200 francs in Higher Grade schools. Additions for length of service are not to be included in these limits. The highest contribution will be one-half, the lowest one-tenth, and contributions will be arranged according to the classification of commune or ward.

76. To prevent change of masters in country communes where taxes are heavy or the taxable capacity is small, the Regierungsrat, on the motion of the Erziehungsrat, will grant definitely-appointed masters and mistresses a supplement of pay until the passing of a new Act with regard to salaries.

These supplements are assured for a period of three years, and the master undertakes to remain at the school for that period.

The annual supplement amounts to 200 francs for the first period of three years, to 300 francs for the second period of three years, to 400 francs for the third period, and thereafter to 500 francs.

The cantonal supplements are ordinarily preceded by a communal supplement. The communal supplements shall not be decreased on account of cantonal supplements being also awarded.

77. The Canton bears two-thirds of the legal pay of hand-work mistresses. The additions for length of service are paid quarterly by the Canton.

78. If, on account of illness, or exposure to infection of the teacher, a *locum tenens* be required, the canton bears the additional cost.

This applies also where a master is called away for military (recruit) service or yearly training.

The pay of a *locum tenens* amounts to 30 francs in the Primarschule and 35 francs in the Sekundarschule per week, and 80 centimes an hour in the work-school (Arbeitschule).

79. The Canton contributes towards the cost of providing teaching and class materials according to the circumstances of the case. Primary communes receive from 25 per cent. to 75 per cent. Higher Grade wards receive from 20 per cent. to 50 per cent.

The Regierungsrat will issue a bye-law on this subject.

80. The Regierungsrat is empowered to support the union of school communes by cantonal contributions.

81. Institutions for teaching destitute, imbecile, blind, deaf and dumb, epileptic, scrofulous, and rickety children shall be supported with proportional cantonal contributions, provided that they conform to cantonal requirements.

Such institutions may be taken over or erected by the Canton. Where necessary, cantonal contributions may be made towards the cost of the maintenance and instruction of individual children.

SECTION V.

82. This law comes into force on 1st May, 1900.

83. At the commencement of the session 1900-1901 the Classes 7 and 8 of the Primarschule replace the Classes 1 and 2 of the Ergänzungsschule (Half Timers' school).

The Ergänzungsschule and the Singschule disappear at the end of the session 1899-1900.

84. Revokes sections of previous Acts.

85. Section 15 of the Act of 23 December, 1859, is altered as follows:—

Every district shall have a district school board of at least nine members. The Regierungsrat otherwise determines the number of members in accordance with the needs of the district.

86. School communes desiring to claim the privilege of Section 14 (2) must vote on the question before 1st January, 1900.

87. The Erziehungsrat will take every precaution that sewing mistresses (teachers in *Arbeitschulen*) in office on the passing of this Act may enjoy the advantages of this Act.

NOTE.—The vote on this measure was as follows :—

Number of voters	-	-	-	-	-	-
Ayes	-	-	-	-	-	-
Noes	-	-	-	-	-	-
Void (spoilt)	-	-	-	-	-	-
Unmarked	-	-	-	-	-	-
Total votes cast	-	-	-	-	-	-

THE ÉCOLES MATERNELLES OF PARIS.

“Rappelons-nous que nous avons moins à faire autrement que nous ne faisons qu'à faire mieux d'après nos propres règles ; qu'il s'agit avant tout de donner à l'enfant la petite part d'activité raisonnée qui est l'attrait en même temps que l'aiguillon de l'étude.”

GRÉARD, Éducation et Instruction : Enseignement Primaire.

The Écoles Maternelles are the direct descendants of the old Salles d'Asile (combined day schools and shelters for little children), and as they still retain traces of their origin, a short sketch of the history of the older institution may be of some interest.

Salles
d'Asile.
Sketch of
History.

The first idea of a Salle d'Asile came not from Paris but from the little commune of Ban-de-la-Roche in the Vosges, where, in 1771, Pasteur Oberlin opened the first of the Écoles à Tricoter, so called because the children whom he gathered together there were always taught some kind of manual work, as well as to read, sing, cipher, and say their prayers. The method pursued in these schools is thus described by M. Gréard in his report of 1875:—

“In the morning the lessons were held in the schoolroom. In the afternoon, when the time of year allowed, they were given in the fields. The Mistresses were called ‘Conductrices,’ and as they went along they taught the children the names and virtues of the plants they found on their way ; they made them observe, reflect and reason concerning the simplest phenomena of nature ; they opened their minds to some idea of the great laws of universal life, their hearts to love of their neighbour and respect towards God. The walk, wisely regulated, strengthened the body ; the good order which reigned trained the character in habits of obedience and discipline ; and the child came home with a stock of health and of useful observations, and with his heart full of good will.”*

From the first, women were associated as “Conductrices” in the work of these schools, and it is to a woman, Mme. Pastoret, that the first Salle d'Asile in Paris owes its origin. In 1801 she

* L'Instruction Primaire à Paris et dans les Communes du Département de la Seine en 1875, par M. Gréard Paris, 1876.

founded a Salle d'hospitalité, where children whose parents were obliged to be at work all day might be taken in and cared for during the enforced absence of the latter. This was, however, rather a crèche than a Salle d'Asile, and in 1825, Mme. Pastoret, hearing of the success of the early infant schools in London, determined to make a fresh start on rather different lines. A committee of ladies (Comité de Dames) was formed, money was collected, and on April 1st, 1826, the first actual Salle d'Asile was opened in the rue du Bac under the name of Salle d'Essai. Before the end of the year eighty children of both sexes, from two to six years old, were in attendance there. In 1828 M. Denys Cochin, Maire of the XII. Arrondissement of Paris, established, at his own expense, in the rue St. Hippolyte, an Asile Modèle with a Normal Course attached to it. The success of this model school gave a great impulse to the movement—subscriptions flowed in, and in less than ten years the number of schools had risen to 24, and the children in attendance to 3,600.

But M. Cochin's help to the movement did not end with the founding of his model school. He early saw the need of some less precarious form of support than that furnished by voluntary subscriptions alone, and it was largely owing to his efforts that the new institutions were taken first under the protection of the Conseil Général des Hospices; and then, in 1836, transferred to the municipality, and made a charge upon its funds. Meantime, in 1833, the Salles d'Asile received their first recognition by the State as part of the system of primary education of the country. The official circular of July 4th, 1833, interpreting the law of the previous June, says: "In the first rank are the most elementary schools of all—those which are known by the name of Salles d'Asile. These schools receive children between the ages of two and seven, who are still too young to attend the primary school—properly so called—and whose parents, poor and at work, cannot keep them at home."

In 1837 the then Minister of Education, M. de Salvandy, appointed a Commission to draw up a programme for "Examens d'Aptitude" for mistresses of Salles d'Asile, and to make rules for the conduct of the schools.

On this Commission the old "Comité de Dames" was called to serve, and M. Cochin was appointed president. Ten years later M. de Salvandy founded a Training School, first called "Maison d'Études provisoires pour les Salles d'Asile," but, after more than one change of name, finally known as the "École Pape-Carpentier," after the distinguished lady who was its first head, Madame Pape-Carpentier.

In 1855 by the décret et règlement of March 21 and 22, the programme and method for Salles d'Asile were authoritatively settled, and no further change was made until 1881, when a fresh décret (August 2) gave them the name of Écoles Maternelles. The first three articles of this décret are as follows:—

"Art 1. The Écoles Maternelles (Salles d'Asile), public or private, are educational establishments where children of both sexes

receive the care necessary for their physical, intellectual and moral development. The children may be admitted at the age of two years and can remain in the school until they are seven years old.

Art. II. The programme of the Écoles Maternelles includes :—

- (1) The first principles of moral education; some knowledge of common things (*objets usuels*); the elements of drawing, writing, and reading; lessons in language (mother tongue); some idea of natural history and geography: recitations suitable for children.
- (2) Manual training (*exercices manuels*).
- (3) Singing and graduated gymnastic exercises.

Art. III. The Écoles Maternelles are staffed entirely by women."

Meanwhile the law of June 16th, 1881, had made all primary education absolutely free, and in 1882, by the same law (March 16th, 1882), which made education obligatory between the ages of six and thirteen, the school was decreed "neutral" in matters of religion—*i.e.*, giving no form of direct religious instruction.*

In the first chapter of his *Manuel des Salles d'Asile* M. Cochin says :—"It is in order to supply the place of the care, the early impressions and the teaching which every child ought to receive from the presence, the example and the words of its mother, that it has seemed necessary to open halls of hospitality and education for the benefit of the very young;" but the early Salles d'Asile seem to have been woefully deficient both as regards buildings and apparatus in the means to carry out his high ideal. It is said that the infant schools of London were in the beginning largely taken as models, and we read of hundreds of children taught together in one room, of asphalt floors, and of insufficient furniture. In 1847 M. de Salvandy wrote in a report to the King :—"These little schools do not require any apparatus; some galleries or benches, some reading pictures and number frames, a blackboard and a few household utensils, are generally sufficient." The asphalt floors were done away with in 1855, but not till 1881 was any other change made. Then, at last, the one-room school disappears, at least from the official regulations, and one or two class-rooms besides a *préau* or hall are declared necessary.

Écoles
Maternelles
to-day.
Buildings
and
Apparatu

To-day the École Maternelle of Paris presents a very different picture from that called up by the descriptions of the old Salles d'Asile. You enter through the large hall or *préau*, in which are moveable tables and benches for the children's dinner. Out of this opens the kitchen and one or more class-rooms. Two or more class-rooms may be upstairs, but that where the babies are taught is always on a level with the hall. The schools are planned to hold not more than 200 children,† and these are divided into three classes which may again be subdivided if necessary. The rooms are bright, clean, and airy,

* The Écoles Maternelles Libres—*i.e.*, schools which receive no aid from the State, and in which religious instruction is given—have not been dealt with in this paper.

† See Appendix A.

generally hung with pictures, and wonderfully quiet, the building being so constructed that all the windows look upon the playground. It is these Paris playgrounds which perhaps most strike a London observer, accustomed to the bare asphalt wildernesses which our babies have to put up with, often shared, too, with the Girls' Department. Each École Maternelle has its own in undivided possession, and they are all gravelled and planted with trees, chestnuts for the most part, which grow and flourish in that clear air, forming in the spring and early summer a perfect bower of green. With the disappearance of the one-room school has also disappeared the idea that these little schools "*n'exigent pas de matériel de classe.*" The Headmistress of each school is free to choose her own books and materials from an official list supplied to her, the only condition being that she does not spend more than the amount credited to her school, viz., 1 fr. 40 c. per year for each child in average attendance, a small amount, perhaps, but still an advance on the old régime.

teaching
staff.

The first teachers in the Salles d'Asile were for the most part "*religieuses*," and, as was natural, had had no particular training for the more distinctly educational part of their work. But the founders of the Salles d'Asile had it always in mind that they should be educational institutions as well as Asiles, and M. Cochin, as early as 1828, had established a "*Cours Normale*" in connexion with his Model School. In 1837 the "*Certificat d'Aptitude*" for directrices or headmistresses was established, but assistant-teachers were not obliged to possess it, and it was dispensed with altogether in the case of "*religieuses*," in whose hands the teaching still mainly rested.* In 1847, as we have already seen, the École Pape-Carpentier was founded for the training of teachers for the Écoles Maternelles, and no further change of importance seems to have taken place as regards teaching staff till 1881, when it was decreed that only women should teach in the schools. Up to this time the training was quite separate from that for the Écoles Primaires; but in 1882 the École Pape-Carpentier, having grown too small for the number desiring training, it was decreed that Normal Courses for the preparation of Directrices for the Écoles Maternelles should be attached to the Écoles Normales d'Institutrices, and in 1884 (by the décret of June 14) the Écoles Normales became "*establishments for the training of teachers (men and women) for the Écoles Publiques (Écoles Maternelles, Écoles Primaires Élémentaires, and Écoles Primaires Supérieures)*," and by the same décret, "*an École Maternelle is to be attached to each École Normale for women.*" In 1886 the special "*Certificat d'Aptitude*" for Écoles Maternelles was abolished, and with it the last difference between the qualifications of teachers for Écoles Maternelles and Écoles Primaires

* The substitution of lay for religious teachers in the Écoles Primaires, including the Écoles Maternelles of Paris, was effected between 1879 and 1884. The law of October 30th, 1886, decreed an exclusively lay teaching staff for all the Écoles Publiques of France.

pour Filles disappeared. Since 1882 the rate of payment of teachers in the Paris Écoles Maternelles has also been on a level with that in the Girls' Primary Schools.

The staff of an École Maternelle includes at the present time:—

- (1) A Directrice or Headmistress.
- (2) One or more Assistant Mistresses according to the size of the school.*
- (3) A porter.
- (4) One or more women servants, whose business it is to keep the school clean and aired, and to help the teachers in giving the necessary care to the children's persons.

The first Salles d'Asile in Paris were under the supervision of the "Comité de Dames" before mentioned, and were subject to no other inspection, but as early as 1835 they were included amongst the establishments to be visited by the Inspectors of Primary Schools, and in 1837, after they had been transferred to the municipality, women inspectors were appointed by the "Comités Locaux d'Arrondissement" under whose authority the Asiles had been placed. These inspectrices distributed aid to the schools as well as performed the ordinary duties of inspection.

The Écoles Maternelles of Paris are to-day together with all the other establishments for Primary Education in the Département de la Seine, under the authority of the Directeur de l'Enseignement Primaire du Département de la Seine, the title given to the Inspecteur d'Académie who has charge, under the control of the Prefet de la Seine, of the Primary Education of the Département. But in addition to the Directeur and his assistant inspectors, who are paid by the State, there are ten women inspectors, five paid by the Département de la Seine, and charged with the pedagogical inspection of the Écoles Maternelles of Paris and the suburbs, five paid by the municipality, and having under their supervision the finances and "plant" of the schools in Paris itself. These latter have each a district assigned to them containing Écoles Primaires as well as Écoles Maternelles, so that their time is not wholly occupied with the former.

Like the old Salles d'Asile, the Écoles Maternelles are open from early morning till quite late in the evening for the convenience of parents who are at work all day. The extreme limits are in summer from 7 a.m. to 7 p.m., and in winter from 8 a.m. to 6 p.m., and some member of the teaching staff must be present during the whole time the school is open. But the extent to which the parents make use of the schools in this way

* The number of children on the rolls of the Paris Écoles Maternelles is 37,737, and the number of teachers (head and assistant) 725; roughly, one mistress (including the headmistress) to every fifty-two children. But the average attendance is only four-fifths of the number on the rolls, so that each mistress is really responsible for about forty children only.

depends very much on the character of the neighbourhood, and one finds the schools opening and closing at various hours according to local needs. The regular school time-table extends from 9 a.m. to 4 p.m., including a quarter of an hour for recreation in the middle of the morning and half an hour in the afternoon (or *vice versa*), an hour and a half for lunch and recreation, and half an hour before both morning and afternoon school for inspection of the children's condition, washing of hands, etc. Before 9 a.m. and after 4 p.m. the children play under the supervision of the teacher in charge.

ogrammes. The programme of the École Maternelle includes :—

- (1) First principles of moral education.
- (2) Exercises in language.
- (3) Object lessons, science of common things, first notions of natural history.
- (4) Drawing, writing, reading.
- (5) Arithmetic.
- (6) Geography.
- (7) Manual exercises.
- (8) Singing.
- (9) Gymnastics. And
- (10) For older children (5 to 6) Recitations bearing on national history.

At first sight this programme seems somewhat overburdened for little children of from two to six years old, but it is very carefully safeguarded by directions against over-pressure and mental fatigue. "Headmistresses," says the official programme, "should make it less their aim to send up to the primary school children well on in their studies, than children well prepared to learn," and in the best schools, at any rate, this ideal is well kept in view. True, there are indications of a feeling amongst the headmistresses of the Girls' primary schools that the children come up to them less well prepared than might be, and of an attempt being made in some cases on the other side to meet this by somewhat pressing on the elder children, but it is possible that this arises only from some slight misunderstanding on the part of each school of the functions of the other, a survival from the time when the teachers of the Écoles Maternelles were trained in separate institutions from their sisters of the Girls' Primary Schools, and had not the same opportunities as now for friendly interchange of views.

The lessons in the École Maternelle are simple and short, twenty minutes being the longest time allowed for each. To avoid mental fatigue, a lesson which employs the hands always follows one which employs the mind only, and they are further separated by some few minutes of play or song, or gymnastics. Reading and writing proper are not begun till the child is five, with the babies simple lessons in their own language (practically

lessons in speaking correctly) take their place. To judge from the specimens of both reading and writing which may be heard and seen in the top class of a good École Maternelle, the postponement has none but good results. There is very little regular Kindergarten teaching in the Paris schools. Indeed, the word Kindergarten is not heard—École Maternelle seems to better express the French idea of what an infant school should be—and the “gifts” are considered, as one experienced headmistress said to the writer of this paper, “unsuited to the nature of French children, who want something lighter and gayer.” The child’s need of activity is not lost sight of, but this activity, it is thought, must be so guided that he shall not make things “ugly without form, grotesque and out of proportion, as happens when too much is left to children’s initiative, insufficiently directed and helped.” So says Mlle. Depouilly in the introduction to one of her excellent little books on Manual Training. In fact, the child must imitate before it can invent. As a consequence, perhaps, of this, the drawing in the Écoles Maternelles seems wanting in originality. But the air of Paris, as R. L. Stevenson says, is alive with technical inspiration; the way to make the best use of material seems inborn in French children, and even in the tiny “Exercices Manuels” of the École Maternelle these two facts are reflected. The children have, even at this early age, real joy in exercising this particularly French faculty of making the best of material, and, as Mlle. Depouilly says, “Nothing is more gay and attractive than the sight of a class occupied in flower-making.” Flower-making is one of most widely used of the “Exercices Manuels” or “Distractions Manuelles,” as Mlle. Depouilly would prefer to have them called. It is indeed rather as “distractions” than as lessons that they are used, though their educational value is not lost sight of, and they should, according to Mlle. Depouilly, form the basis of a system of manual training carried on through all the stages of the child’s school career from the École Maternelle to the École Professionnelle. Other forms of Manual Training widely used are “tricot sans aiguilles” (knitting without needles), and “tissage” (or simple weaving), but knitting proper is never seen and sewing is entirely forbidden as both dangerous, on account of the needles, and too tiring for small children. This postponement, again, seems to do nothing but good, not only in the École Maternelle itself, where the wearisome sewing lesson is unknown, but in Écoles Primaires and Primaires Supérieures if one may judge by the exquisite specimens of needlework produced there.

It has been mentioned that a necessary part of each school is **Feeding of Children.** Here the dinners are cooked for those of the children whose parents wish them to stay for the mid-day meal. For this meal a small sum, varying from 10 to 20 centimes, is charged to all who can afford it. It consists of two courses, generally meat and vegetables or soup and vegetables, and each child brings with it in the morning a little

basket containing bread and something to drink, generally a little bottle of wine. The meal takes place in the hall, perhaps a third of the children staying, and the headmistress is always there to see that everything is as it should be. After the meal the children are washed by one of the women-servants, or wash themselves if old enough, great pains being taken, especially in the poorer neighbourhoods where such teaching is most needed, to inculcate habits of cleanliness and tidiness.

Those children who cannot afford even the small sum charged, are given their dinner free. The headmistress sends up the names of applicants for free dinners to the Mairie of the Arrondissement in which the school is situated. If she knows the parents and can vouch for their need of the help, the claim is allowed without question; if not, the Mairie holds an inquiry into the circumstances, and the claim is allowed or not, according to the result. No one knows except the headmistress, the Mairie and the parents, which children are on the "liste gratuite," no difference at all being made in their treatment.

According to the official statistics, the number of free dinners is increasing every year. The municipal subvention, which in 1896 amounted to 867,501 frs., rose in 1897 to 912,885 frs., in 1898 to 890,715 frs., and in 1899 to 1,017,695 frs., while the percentage of free meals has increased from 61·36 per cent. in 1896 to 63·93 per cent. in 1898.

On the other hand it would not seem, from anything I heard or saw in the schools, that undue advantage is taken of the system. I was told of parents applying for the help in time of temporary distress, and again requesting that their children might be taken off the free list when the stress was over. But I saw the working of the system in certain Écoles Maternelles only, and to form a judgment either as to its effect on the French people themselves or on the still more difficult question whether a similar system would benefit England, it would be necessary not only to visit many more schools and different types of schools, but to learn by careful enquiry its effect upon the home, and to take into consideration very many difficult social and economic questions which are beyond the scope of this paper.*

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sternelle.

The aim of the École Maternelle is well expressed in the words of the official programme: —

"The École Maternelle is not a school in the ordinary sense of the word; it is the transition from the family to the school; it retains the indulgent and affectionate gentleness of home, while initiating the child into the work and regularity of school. The success of the headmistress of an École Maternelle must not therefore be judged wholly or principally by the number of things taught to the children, or by the high level of the teaching and the number and length of the lessons, but rather by the sum of good influences which are brought to bear on the child,

* See Appendix C.

by the pleasure which he is made to take in the school, by the habits of order, cleanliness, politeness, attention, obedience, and intellectual activity which he acquires, so to speak, in playing.

These principles laid down, what method will be most suitable to the Écoles Maternelles? Evidently that which the name suggests—that which consists in imitating as nearly as possible the educational methods of an intelligent and devoted mother."

"The École Maternelle is not a school in the ordinary sense of the word; it is the transition from the family to the school," and again the success of the headmistress is to be judged "by the sum of good influences which are brought to bear upon the child . . . by the habits of order, cleanliness, politeness, attention . . . which he acquires, so to speak, in playing." These two sentences seem to me to indicate the particular excellences which distinguish the French infant schools. They have been called inferior,* and no doubt if one compares an École Maternelle, even one of the best, with a good London Kindergarten, one is struck at once with the greater variety of the English time-table,† with the superiority of the teaching apparatus, and sometimes, too, with the greater originality and freedom of the teaching itself, but that should not, I think, cause one to overlook certain peculiar merits possessed by the French schools. It seems to have been realised from the first in France to a much greater degree than is even now the case in England, that if you are driven by the circumstances of the parents to admit children to school while they are still practically babies, the school should provide that training in habits of cleanliness and order and in good manners (in the sense in which "Manners makyth man") which form an essential part of every child's education, and which the children of another class of society receive at home from their mothers. I do not mean to imply that the English infant school does not indirectly do much towards this end, but it is a *school* (whether called Kindergarten or not), by which I mean that the intellectual development of the child is the thing upon which most stress is laid. In the École Maternelle the home and the school meet, and if on the intellectual side it does not reach the same level as the English school, it is surely much that it deliberately undertakes to supply some substitute for that home training of which the children are deprived by the circumstances of their parents. I yield to no one in my admiration of the work of our London teachers, but circumstances beyond their control make many things difficult or impossible which are comparatively easy of attainment in Paris. One cannot enter an École Maternelle in Paris without being struck with the fact that the task of the headmistress has been made easier for her by the absence of some of those

* Not long ago a gentleman of large experience in educational matters, when lecturing on Elementary Schools, French and English, dismissed the Écoles Maternelles with the words "very inferior."

† For comparison of Time-tables, see Appendix B.

conditions which cause infant school work in London to be always so difficult and often so discouraging. The Paris schools are small; they are quiet; women-servants, responsible for the cleanliness of the premises and bound to help the mistresses in their care of the children's persons, form a necessary part of the staff of every school; the absence of smoke in the air makes real cleanliness possible, and the same clear air allows trees to grow and flourish in all parts of the town. Last, but perhaps most important of all, there seems to be an absence amongst the children themselves of anything like extreme poverty.* Outside the school, too, the headmistress seems to receive more generally than has hitherto been the case in England (though things here are distinctly improving) help and encouragement from the parents, who seem to take a genuine interest in the children's work, and in what is being done for them. Much depends, of course, as in every school, upon the headmistress, but when these conditions are united under a woman with a real genius for children, as under Mlle. Depouilly at the École Maternelle in the rue des Martyrs, then, indeed, the school becomes a place of real happiness for the little ones. The small numbers make it possible to keep order without imposing too strict a discipline, and the school seems really, in the words quoted just now, "to retain the indulgent and affectionate gentleness of home, while initiating the child into the work and regularity of the school."

MARY S. BEARD.

* For a comparison of the pauperism of London and Paris, see Appendix C., foot-note. If it is really the case that the amount of pauperism in the two cities is about equal, one can only admire the genius of the Frenchman, and still more of the Frenchwoman, for making the most out of a little

APPENDIX A.

A Londoner visiting Paris can hardly fail to be struck, when comparing the two cities, with the relatively small number of children to be seen habitually in the streets of Paris, even in the poorer quarters. All that is meant by the words "stationary population," and, by contrast, all that is meant by the words "increasing population" is forcibly brought home to one. At least so it seemed to the present writer when in Paris in the spring of 1899.

But it is, of course, possible that the different habits of the two peoples might largely account for the different appearance of the streets as regards the children, and, in order to get some idea of the real state of the case, an enquiry has since been made as to the number of children of elementary school age (including infants) per 1,000 of population in the two cities. The results of this enquiry are here given :—

The number of children (3—13) scheduled by the London School Board visitors, May, 1899, is given in the School Accommodation Report of the London School Board for 1898—9 as 831,010. The population of London under the School Board was estimated on April 1st of the same year at 4,557,852, giving us 182·32 children per 1,000 of population. The corresponding figure for Paris is 120·64. It should be added that the Écoles Maternelles receive children at two years old, a year earlier than they are received in London.

APPENDIX B.

COMPARISON OF TIME-TABLES.

The Official Time-Table of the Écoles Maternelles, given below (*a.*), is taken from "L'Enseignement Primaire Public à Paris, 1877-1888. I. Les Écoles Maternelles—Les Écoles Primaires Élémentaires" (Préfecture de la Seine, Ville de Paris, Direction de l'Enseignement Primaire), Paris, 1889.

The English Time-Tables which follow (*b.*, *c.*, *d.*) have been furnished by the kindness of Mrs. Cashmore, the Headmistress of the Goodrich Road Infants' School, one of the schools of the London School Board.

For purposes of easier comparison one of the Goodrich Road Time-Tables (*b.*) has been rearranged according to the French plan, but it has been printed again in its original form (*c.*), as giving thus a clearer idea of the work of a complete week.

It will be understood that these English time-tables are given as indicating what is now being aimed at in many infant schools in large towns, but not at all as illustrative of what in the stricter sense would be called an average school.

APPENDIX B.—*Continued.*

(a)—OFFICIAL TIME-TABLE OF THE ÉCOLES MATERNELLES OF PARIS.

9 h. à 9½ h.	{ Inspection de propreté—Conduite aux cabinets—Entrée en classe.			
9½ h. à 10½ h.	- Exercices de lecture, d'écriture et de langage.			
10½ h. à 10¾ h.	- Récréation dans la classe et jeux enfantins.			
10¾ h. à 11½ h.	<table> <tr> <td>Lundi, Mercredi, et Vendredi,</td><td rowspan="2">{ Anecdotes, récits, biographies tirés de l'histoire nationale—Contes, récits de voyage, notions de géographie.</td></tr> <tr> <td>Mardi, Jeudi, et Samedi</td></tr> </table>	Lundi, Mercredi, et Vendredi,	{ Anecdotes, récits, biographies tirés de l'histoire nationale—Contes, récits de voyage, notions de géographie.	Mardi, Jeudi, et Samedi
Lundi, Mercredi, et Vendredi,	{ Anecdotes, récits, biographies tirés de l'histoire nationale—Contes, récits de voyage, notions de géographie.			
Mardi, Jeudi, et Samedi				
11½ h. à 1 h.	- Sortie de la classe, déjeuner et récréation.			
1 h. à 1½ h.	- Conduite aux cabinets, lavabo, rentrée en classe.			
1½ h. à 2 h.	- Exercice de lecture et de langage.			
2 h. à 2½ h.	<table> <tr> <td>Lundi, Mardi, Jeudi, et Vendredi,</td><td rowspan="2">{ Calcul.</td></tr> <tr> <td>Mercredi et Samedi</td></tr> </table>	Lundi, Mardi, Jeudi, et Vendredi,	{ Calcul.	Mercredi et Samedi
Lundi, Mardi, Jeudi, et Vendredi,	{ Calcul.			
Mercredi et Samedi				
2½ h. à 3 h.	- Récréation dans la cour au dans le préau—Exercices gymnastiques.			
3 h. à 3½ h.	<table> <tr> <td>Lundi, Mercredi et Vendredi,</td><td rowspan="2">{ Dessin.</td></tr> <tr> <td>Mardi, Jeudi, et Samedi</td></tr> </table>	Lundi, Mercredi et Vendredi,	{ Dessin.	Mardi, Jeudi, et Samedi
Lundi, Mercredi et Vendredi,	{ Dessin.			
Mardi, Jeudi, et Samedi				
3½ h. à 4 h.	<table> <tr> <td>Lundi, Mercredi, et Vendredi</td><td rowspan="2">{ Petites leçons de morale et d'hygiène.</td></tr> <tr> <td>Mardi, Jeudi, et Samedi</td></tr> </table>	Lundi, Mercredi, et Vendredi	{ Petites leçons de morale et d'hygiène.	Mardi, Jeudi, et Samedi
Lundi, Mercredi, et Vendredi	{ Petites leçons de morale et d'hygiène.			
Mardi, Jeudi, et Samedi				
4 heures	- Sortie et surveillance au préau et dans la cour.			

NOTE.—Les marches et les évolutions auront lieu en mesure et avec accompagnement de chant.

APPENDIX B—*Continued.*

(b)—TIME-TABLE.—GOODRICH ROAD BOARD SCHOOL, E. DULWICH.
INFANTS' DEPARTMENT. CLASS V. AND VI. AVERAGE AGE, 5 TO 6.

9 to 9.10	-	Prayers and early marks.
9.10 to 9.40	-	Scripture.
9.40 to 10	-	Physical exercises. Registers closed.
10 to 10.30	-	Reading.
10.30 to 10.45	-	Recreation.
10.45 to 11.10	{	Monday, } Number lesson.
		Wednesday, }
		Friday }
		Tuesday { <i>Girls</i> —Needlework and needlework drill.
		{ <i>Boys</i> —Arithmetic.
	{	Thursday { <i>Girls</i> —Needlework and needlework drill.
		{ <i>Boys</i> —Number lesson.
11.10 to 11.20	-	Singing, games, or repetition.
11.20 to 11.50	{	Monday, } Writing or drawing.
		Wednesday, }
		Friday }
		Tuesday { <i>Girls</i> —Needlework and needlework drill.
		{ <i>Boys</i> —Writing.
11.50 to 12	-	Dressing and dismissal.
2 to 2.30	-	Assembling. Registers. Physical exercises.
2.30 to 3	{	Monday, } Free-arm drawing.
		Wednesday, }
		Tuesday - Object lesson.
		Thursday - Sense training.
		Friday - Painting from nature.
3 to 3.15	-	Recreation.
3.15 to 3.40	{	Monday, } Object lesson.
		Wednesday, }
		Tuesday - Painting from Nature.
		Thursday - Modelling from Nature.
		Friday - Free drawing.
3.40 to 3.50	-	Songs, games, repetition, etc.
3.5 to 4.10	{	Monday - Pattern making.
		Tuesday - Paper folding or jointed lath.
		Wednesday - Gift III. or tablet laying.
		Thursday - Singing.
		Friday - Games and stories.
4.10 to 4.20	-	Dressing and dismissal

APPENDIX B.—Continued.

(c.) TIME-TABLE.—Goodrich Road Board School, E. Dulwich. Infant's Department. Classes V. and VI. Average age, 5 to 6.

Days.	9 to 9.10	9.10 to 9.40	10 to 10.30	10.30 to 10.45	10.45 to 11.10	11.10 to 11.20	11.20 to 11.50	11.50 to 12	2 to 2.30	2.30 to 3	3 to 3.15	3.15 to 3.40	3.40 to 3.50	3.50 to 4.10	4.10 to 4.20
Monday					Number Lesson.	Repetition	Writing or Drawing.	Dressing and Dismissal.	Assembling, Registers, Physical Exercises.	Free Arm Drawing.	Recreation.	Object Lesson.	Games, Repetition, &c.	Pattern Making.	Dressing, and Dismissal.
Tuesday					Girls and Boys. Arithmetic.	Needlework. " or Arithmetic.	drill Writing.			Object Lesson.		Painting from Nature.	Paper Folding or Jointed Lath.		
Wednesday					Number Lesson.	Games.	Writing or Drawing.			Free Arm Drawing.		Object Lesson.	Gift III. or Tablet Laying.		
Thursday					Girls and Boys. Number Lesson.	Needlework. " or Number Lesson.	drill Writing.			Sense Training.		Modelling from Nature.	Singing.		
Friday					Number Lesson.	Singing.	Writing or Drawing.			Painting from Nature.		Free Drawing.	Games and Stories.		

APPENDIX B.—*Continued.*

As time-tables taken by themselves do not necessarily convey, except perhaps to the specially experienced teacher, a full idea of the aims with which the work of the school is carried on, Mrs. Cashmore has kindly drawn up the following brief memorandum as explanatory of the time-tables printed above.

"The school consists of a large hall and six class-rooms, and is built to accommodate 498 children. The chief aim of the school is the harmonious development of the children, the physical, spiritual, moral, and mental needs being provided for in turn. The ages of the children range from 3 to 7 years.

The children are assembled in the large hall at 9 a.m. for prayers, and sometimes a hymn is sung, and sometimes sacred music such as selections from "The Creation," "Gloria," etc., is played instead. A few combined movements of all the classes at command of the head teacher gives the idea to the children that prompt obedience throughout the day is expected from every child, and also an idea of obedience to the laws which govern a community is conveyed, as well as an exercise for the training of the will power.

To the accompaniment of music the various classes march to their several rooms for the Scripture lesson, which consists of simple stories from the Bible, with any lesson that may be drawn applicable to child life. Physical exercises are then taken either with or without music for 5 or 10 minutes, according to the ages of the children, on the principle that physical culture to be effective must be regular and systematic.

Reading, as being the most difficult thing for a young child to master, is then taken in varying stages, the method being based on sounds; but the irregularities of the language really necessitate the employment of other methods as well.

After this mental effort, recreation in the playground follows for fifteen minutes, when free play is encouraged and vigorously indulged in. At the sound of the bell the children promptly and quietly assemble in the playground, from which they march to their various class-rooms for the number lesson, which is taken now as the best time for it after exercise in the open air. The number is always taught with objects, such as shells, acorns, sticks, beads, etc., each child being provided with a sufficient quantity. Pictures of numbers, and various arrangements of the same are taken, rather than the mere counting. The principle of the first four rules with any possible number up to 20 and over is attempted with the older children of six years. An action song or game gives relief, and affords scope for physical movement, which the child-nature craves and needs after sitting still.

Writing, as not calling forth so much mental effort on the child's part, ends the morning session. The afternoon session commences in the same way as the morning by children assembling in the hall, and, with a few short, quick movements, forming into classes and marching to the various rooms, when, after roll-call, a few physical exercises are practised as in the morning.

The work of the afternoon is devised so that it shall not call forth so much mental strain as that of the morning, and shall partake more of the manual.

The object lessons are taken from objects with which the children come in contact in their daily life; and, wherever possible, each child is provided with a specimen of the object to be observed; and the children are encouraged to freely state the results of their observations, opinions, and experiences, and above all to ask questions concerning the same. Animal lessons are taught with the motive of promoting kindness to animals. In the sense-training lessons the children find great fun and enjoyment in detecting what an object is either with the sense of touch, taste, or smell; also from the sound, what object out of their sight has been struck.

Not many of the ordinary Fröbelian occupations are taken, as the sizes of the classes and other causes preclude the employment of these, but the

principles of Fröbel are strictly adhered to, and all the work of the school is based on those of Fröbel, Pestalozzi, Herbart, &c.

Great stress is laid on Nature work, and the development of artistic faculties, love of the beautiful, powers of observation, manipulative skill, knowledge of form and colour, drawing, truthfulness, imagination and memory are all cultivated through it.

The children are provided with a box of six colours, a palette, water-well, and brush each, as well as a specimen of the object to be painted whether leaf, spray, flower, or fruit.

The object lesson, painting, modelling, and drawing are frequently, and whenever possible, combined. The children mix their own colours, under the teachers' guidance, and draw straight away with the brush.

In the free arm drawing the children are each provided with a mill-board, 12 × 21, placed vertically in a slot in their desks. They stand to draw, using the whole arm in doing so.

The drawing lesson consists of two parts—(1) to draw with the teacher some object chosen as affording special scope for a particular line or form, according to scheme; and (2) the other part devoted to "Draw what you like." This affords scope for exercise of memory, imagination, and also brings out the individuality of the child.

Recitations and songs are always taken in connection with the Nature work, and stress is laid on dramatic action in both.

Music is sometimes employed to interpret a picture or series of pictures, illustrating a story or fairy tale.

The play idea of Fröbel is carried out in all lessons, and the children's love of fun is allowed full scope, the teachers always being encouraged to cultivate a cheerful manner and sense of humour in dealing with the children.

The will-power of the children is often appealed to, and great stress is laid on truthfulness as the foundation of character.

The above remarks refer to the school generally. The babies do not assemble in the hall, but proceed on arrival straight to their own room, where more of the freedom of the home is allowed them, and a change of occupation takes place every 15 minutes or so."

APPENDIX C.

FEEDING OF SCHOOL CHILDREN.

Before this paper was printed, the writer consulted Mr. C. S. Loch, the Secretary of the London Charity Organisation Society, on the economic and social bearing of the feeding of school children, and how far the experience of Paris could be regarded as throwing light on the corresponding problem in London. By Mr. Loch's permission his comments are summarised as follows:—

Mr. Loch emphasised the necessity of studying these and similar questions from the point of view of the home, as well as that of the school. An institution may, like the Écoles Maternelles in Paris, show no signs of harm being done, but it is not safe to take for granted that therefore the home and the wider life of the nation are not affected. Enquiries in regard to children who are said to be in need of relief or assistance show how different the causes of distress are in the different cases, thus indicating that a system of providing food would not meet the difficulty in most instances, and, applied in all cases alike, would certainly be injurious to some. Thus, in London, in 55 cases with regard to which enquiry was made at the home, as well as at the school, it was found that illness was the cause of distress in 12; widowhood, or widowhood *plus* outdoor relief in 3; drink or vice in 14: alleged want of work, usually combined with

laziness, in 8 ; insufficient savings (cases for the provident visitor) in 7 ; neglect of relations in 3 ; and in 8 there was no ground for relief, nor were the cases suitable for the intervention of a provident visitor. With regard to towns other than Paris in which the system of municipal school relief has been introduced, in Lyons there has been some discontent with the results of this relief. There considerable attention is paid to administration relief, and amongst the inhabitants is a comparatively large Protestant population. This view is supported by the answer recently published in the Appendices to the Report of the Committee of the School Board for London on Underfed Children attending School. In answer to a question respecting the effects of this system the following reply is here given :—"Yes, there are abuses ; unfortunately they occur very often." Other references in the Appendix (No. 9) also support this view. At Brussels, the Executive Committee, reporting on the result of their inquiries in various towns—Ghent, Antwerp, Liège, and elsewhere—state that "experience has shown that except in cases of accidental and temporary necessity public and systematic relief only tends to moral deterioration. . . . It is urged that all children who are, or who seem to be, in want, are to be helped. It is obvious that this is the surest way to augment the numbers who require such aid. . . . Our energies should be directed to restoring self-respect, and in making parents feel the necessity of working for their children. . . . With many, the necessity of working for their children is the last remnant of personal dignity. . . . Every distribution of relief produces an increased crowd of applicants."

The figures published with regard to the feeding of children in Paris by the Municipality confirm this statement. The municipal subvention, which amounted to 545,900 fr. in 1892, reached the total of 912,885 fr. in 1897 ; and the number of meals rose from 6,971,340 to 8,229,870. The increase had already alarmed the authorities who have not yet found any way of putting a stop to it.

In considering methods of relief at schools, the different traditions of French and English life should also be taken into account. Further, unlike the English, the French have adhered to the system of combining in one fund payments of a charitable nature, connected, for instance, with endowed charities, and payments raised by rates. How far this system is working well is a matter of opinion. In appearance, therefore, their system of public relief has a more charitable aspect. In England, on the other hand, there is the very large administration of the poor law, through which as much as £3,237,576 is expended in the gross, in the Metropolis ; and, in addition to this, there is the considerable sum expended in connexion with voluntary charities and endowments. To introduce, as is now proposed, a third form of relief—municipal relief for children—would result in a further dislocation of home life, and, it is to be feared, in the increase of that class of irresponsible citizens which is one of London's greatest dangers. Comparing France and England it should be remembered also that in France the population is almost stationary, whereas in England each decade shows a large increase. The bearing of this question upon the administration of relief had to be considered. Generally speaking, also, the poor are more widely distributed over the surface of Paris than is the case in London. The whole problem of administration in Paris, indeed, differs not a little from that in London, and from some points of view is less difficult to handle.

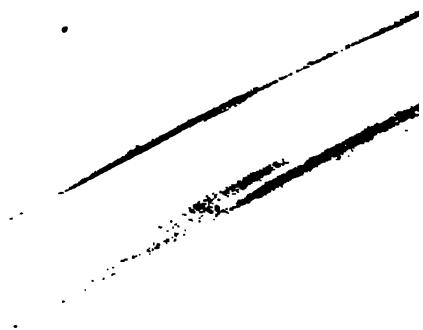
The pauperism of London and Paris might be compared. In the "*Rapport sur les Secours à domicile dans Paris*," published by the Conseil Supérieur de l'Assistance Publique, it appeared that 2.51 per cent. of the population in Paris were necessitous persons in receipt of relief. The return quoted in the report refers probably to the figures for the year 1893. In that year in London the pauperism was returned at 2.52 per cent. It would thus seem that the pauperism of London and Paris are practically the same, and it can hardly be argued that the system of relief in Paris tends to produce dependence less than the system in London. At the same time, it must be admitted that returns of different countries have to be most carefully considered in reference to differences in their social conditions and history, if any reasonable conclusions are to be drawn from them.

[The First Edition of this paper was published in June, 1901.]

THE SIMPLIFICATION OF FRENCH SYNTAX.

DECREE OF THE
FRENCH MINISTER FOR PUBLIC INSTRUCTION,
FEBRUARY 26, 1901.

1. INTRODUCTORY NOTE.
2. TRANSLATION OF THE CIRCULAR LETTER, RELATING TO
THE SIMPLIFICATION OF SYNTAX, ADDRESSED BY THE
MINISTER FOR PUBLIC INSTRUCTION AND FINE ARTS TO
THE RECTORS OF EDUCATIONAL DISTRICTS (ACADÉMIES),
FEBRUARY 28, 1901.
3. TRANSLATION OF THE DECREE AND OF THE SCHEDULE.



THE SIMPLIFICATION OF FRENCH SYNTAX.

I.—INTRODUCTORY NOTE.

A few words will suffice to explain the circumstances in which the Decree of February 26, 1901, relating to the Simplification of French Syntax, was issued by the Minister for Public Instruction.

In January, 1900, the Superior Council of Public Instruction adopted a resolution that a Committee should be appointed to consider what simplifications might be effected in French Grammar for the purposes of school instruction and of examinations controlled by the Ministry for Public Instruction. The Committee was composed of MM. Gaston Paris (President), Henri Bernès, Comte, Croiset, Devinat, O. Gréard, Paul Meyer and Henri Clairin (Secretary). Their report, signed by Monsieur Clairin, was delivered in June, 1900. In it they stated that from the way in which grammar was now being taught, elementary education was losing the simplicity which should always be its distinguishing characteristic, that pupils were perplexed and education hampered by undue insistence both by teachers and examiners on totally unimportant grammatical and orthographical rules. They therefore recommended that such rules should in future be omitted from school grammars and that ignorance of them should not be counted as mistakes against candidates in examinations controlled by the Ministry for Public Instruction, and they drew up a list of cases in which tolerance should be exercised. They repudiated any intention of altering the French language or injuring its best traditions, but they professed that the object of the reforms they proposed was to introduce into examinations a generous and intelligent toleration of alternative usages. It was urged that the benefits of the reform would be reaped in the first place by French children, for their work would become less wearisome and more intelligent. They would be enabled to acquire a wider and more thorough knowledge of French literature instead of burdening their memories with useless rules which were forgotten as soon as learnt. In the second place, if French grammar were made more clear and simple, the study of the French language would be encouraged among foreigners.

A decree, accompanied by this report and the list of grammatical difficulties in which latitude was to be allowed, was issued by the Minister for Public Instruction on July 31, 1900 but its execution was suspended pending the approval of the *Académie française*. The *Académie* at once expressed its sympathy with the principle of the reform and accepted the majority of the concessions, but made certain reservations,

notably in the case of certain rules concerning the agreement of the past participle. Accordingly a joint committee was appointed, composed of members of the *Académie française* and of the Superior Council of Public Instruction, to consider the points on which the two bodies were not in accord and any other points on which fresh proposals, acceptable to both, might be made.

On February 26, 1901, a revised decree was issued rendering compulsory the observance of the recommendations of the Joint Committee, which were appended as a schedule. This decree and the schedule, together with the circular of the Minister for Public Instruction to the Rectors of Educational Districts (*Recteurs d'Académie*) are translated below.

W. G. L.

II.—CIRCULAR LETTER RELATING TO THE SIMPLIFICATION OF SYNTAX ADDRESSED BY THE MINISTER FOR PUBLIC INSTRUCTION AND FINE ARTS TO THE RECTORS OF EDUCATIONAL DISTRICTS.

PARIS, February 28, 1901.

Sir,

On the 31st July last I issued a decree relating to the simplification of French syntax. I felt it my duty, however, before making its provisions obligatory, to await the opinion that I had requested from the *Académie française*; for I felt that any reform in a matter of such delicacy should be supported not only by the authority of the Superior Council of Public Instruction, which determines the curricula and regulates the examinations of the different grades of education, but also of the *Académie française*, whose "prescriptive office it is to labour for the preservation and purity of the language, for the maintenance of its distinguishing characteristics and principles, and the explanation of its difficulties."

The *Académie française* has been kind enough to communicate to me the observations of the special committee appointed by its members to consider the proposed reforms to which I had directed their attention in the decree of July 31, and the schedule attached to it. I learn that the principle of the reform met with no opposition, and that although the proposals of the Superior Council of Public Instruction might not in every case be in accordance with the feeling of the *Académie française*, there was perfect agreement in a great number of cases in which grammatical difficulties can be simplified.

In these circumstances, I have decided to give effect to the reforms on which the Superior Council of Public Instruction and the *Académie* are in accord. This is the object of the new decree which I issued on February 26, and of which I send you herewith a number of copies.

I think it will be useful to direct your attention particularly

to the character of the reform which is hereby sanctioned. It is in fact of importance that teachers and members of examining committees who will be affected by these regulations should understand that there is no question of suppressing any fundamental rules of our syntax. The reform simply aims at rendering elementary instruction in French syntax simpler and easier for children and foreigners, and freeing it from useless complexities.

As early as 1891 one of my honourable predecessors protested against the abuse of grammatical tests and deplored the time spent even in primary schools on the study of rules often disputed by the most famous writers of dictionaries, and affecting neither the character nor the essential principles of the language. I may mention in this connection the use which is still made in some schools of dictations which are, as a rule, nothing but a succession of meaningless sentences in which oddities and catches in spelling are piled up at will. These exercises are of no use, and you will be good enough to request teachers to discontinue them. Dictations should not be artificially manufactured. They should be taken from our best authors, in order that the pupils may have at the same time a lesson in grammar and in literary taste.

The Committee of the Superior Council has alluded to subtle and sometimes false rules which hamper elementary education and serve no purpose either in reading or in the cultivation of intelligence and the development of thought. They have drawn up a sort of catalogue indicating the licences that may properly be allowed. This list, supported by the approbation of the *Académie française*, is appended as a schedule to the present decree.

Henceforth the members of examining committees will no longer have to act upon merely general instructions; they will be in possession of a definite guide which will relieve them of all doubt and render their task easier. On the other hand, masters will know exactly what to retain and what to discard in the books that are used in the lower and middle forms of schools.

The reform in syntax that we are carrying out does not in the least imply that less time and care is to be devoted to the study of French. Quite the contrary. The genius of a language, its flexibility, elegance and clearness do not lie in peculiarities of spelling. They are learnt by studying the works of the great orators and writers. The time gained by the simplification of the grammar will be usefully employed in the study and explanation of selected books and in French essay writing—the only kind of work which is capable of teaching the resources and manipulation of the language.

I request you, Sir, to take the necessary steps to have the accompanying decree put in force. You will be good enough to bring it to the notice of the district inspectors under your direction, the heads of secondary schools and the presidents of the

various examining committees, and to see that it is published in the primary education gazettes.

I remain, Sir, &c., &c.,

The Minister for Public Instruction and Fine Arts,

GEORGES LEYGUES.

III.—TRANSLATION OF THE DECREE AND OF THE SCHEDULE.

1. By virtue of Article 5 of the law of the 27th February, 1880.

2. *In re* the Decree of the 31st July, 1900.

The Minister for Public Instruction and Fine Arts, after consultation with the Superior Council of Public Instruction,

Decrees :

1. In all competitive or other examinations controlled by the Ministry for Public Instruction involving special tests in orthography, the use by candidates of the concessions notified in the present decree shall not be reckoned as mistakes.

The same provision applies to the marking of the various French compositions in the competitive or other examinations controlled by the Ministry for Public Instruction which do not involve special orthographical tests.

2. The Decree of the 31st July, 1900, is revoked.

Given in Paris the 26th February, 1901,

GEORGES LEYGUES.

Schedule to the Decree of February 26, 1901.

SUBSTANTIVES.

PLURAL OR SINGULAR:—

In all constructions where the sense permits the noun-complement to be understood either in the singular or the plural the use of either number will be allowed; *e.g.*, *des habits de femme* or *de femmes*,—*des confitures de groseille* or *groseilles*; *des prêtres en bonnet carré* or *en bonnets carrés*; *ils ont ôté leur chapeau* or *leurs chapeaux*.

SUBSTANTIVES OF TWO GENDERS.

1. AIGLE.—According to present usage this noun is masculine, except when it means standards; *e.g.*, *les aigles romaines*.

2. AMOUR, ORGUE.—Present usage makes these two words masculine in the singular. In the plural the masculine or feminine will be allowed without distinction; *e.g.*, *les grandes orgues*, *un des plus beaux orgues*; *de folles amours*, *des amours tardifs*.

3. DÉLICE AND DÉLICES are, in reality, two different words. The former is rare and rather affected. It is of no use to pay any attention to it in elementary education and school exercises.

4. AUTOMNE, ENFANT.—These two words being of both genders it is useless to pay any special attention to them. The same applies to all substantives which are without distinction either masculine or feminine.

5. GENS, ORGE.—In all cases the adjective qualifying *gens* may be made feminine; e.g., *Instruits* or *instruites par l'expérience les vieilles gens sont soupçonneux* or *soupçonneuses*.

Orge may be feminine in all cases; e.g., *orge carrée*, *orge mondée*, *orge perlée*.

6. HYMNE.—There is no sufficient reason for giving this word two different meanings, according to whether it is used masculine or feminine. Either gender will be admitted, whether it means national anthems or religious hymns; e.g., *un bel hymne* or *une belle hymne*.

7. PÂQUES.—This word may be feminine whether it denotes a date or a religious festival; e.g., *A Pâques prochain*, or *à Pâques prochaines*.

PLURAL OF SUBSTANTIVES.

PLURAL OF PROPER NAMES. — Since there is the greatest obscurity in the rules and exceptions taught in the grammars, proper names preceded by the plural article may in all cases take the sign of the plural; e.g., *Les Corneilles* and *les Gracques*; *des Virgiles* (copies) and *des Virgiles* (editions). And so with the names of persons denoting their works; e.g., *des Meissoniers*.

PLURAL OF NOUNS BORROWED FROM OTHER LANGUAGES.—When these words have thoroughly become part of the French language the plural may be formed according to the general rule; e.g., *des exécutés*; *des déficits*.

COMPOUND NOUNS.

COMPOUND NOUNS.—The same compound nouns are nowadays met with sometimes with and sometimes without a hyphen. It is useless to weary children by teaching unjustifiable inconsistencies. The absence of a hyphen in the expression *pomme de terre* does not prevent it from being a real compound word just as much as *chef-d'œuvre* for example. These words may always be written without the hyphen.

THE ARTICLE.

ARTICLE BEFORE PROPER NAMES OF PERSONS.—It is the custom to use the article before certain Italian family names—e.g., *Le Tusse*, *le Corrège*; and sometimes incorrectly before

Christian names, (*le*) *Dante*, (*le*) *Guide*. Ignorance of this usage will not be counted as a mistake.

Great uncertainty exists also as to the way in which the article which forms part of certain French names should be written: *la Fontaine*, *la Fayette* or *Lafayette*. When such names occur in dictations, it is best to say whether the article ought to be separated from the noun.

OMISSION OF THE ARTICLE.—When two adjectives joined by *et* relate to the same substantive in such a way as to denote in reality two different things, the article may be omitted before the second adjective; e.g., *L'histoire ancienne et moderne* or *l'histoire ancienne et la moderne*.

PARTITIVE ARTICLE.—*Du*, *de la*, *des*, instead of the partitive *de*, will be allowed before a substantive preceded by an adjective; e.g., *de* or *du bon pain*, *de bonne viande* or *de la bonne viande*, *de* or *des bons fruits*.

ARTICLE BEFORE PLUS, MOINS, &c.—The rule which exacts that *le plus*, *le moins*, *le mieux* shall be invariable before an adjective denoting the highest degree of the quality in the substantive which it qualifies, without comparison with other things, is very subtle and of little practical use. It is unnecessary to pay any attention to it in elementary education or in school exercises. *Le plus*, *la plus*, *les plus*, *les moins*, *les mieux* may all be used in such constructions as *on a abattu les arbres le plus* or *les plus exposés à la tempête*.

ADJECTIVES.

AGREEMENT OF THE ADJECTIVE.—In the expression *se faire fort de* the adjective may be made to agree; e.g., *se faire fort*, *forte*, *forts*, *fortes de*.

ADJECTIVE QUALIFYING SEVERAL SUBSTANTIVES.—When a qualifying adjective follows several substantives of different gender, the adjective may always be put in the masculine plural, whatever the gender of the nearest substantive; e.g., *appartements et chambres meublés*.

NU, DEMI, FEU.—These adjectives may agree with the substantive which they precede; e.g., *nu* or *nus pieds*; *une demi* or *demi heure* (without a hyphen between the words); *feu* or *feue la reine*.

COMPOUND ADJECTIVES.—The two component words may be united into one word, which shall form its feminine and plural according to the general rule; e.g., *nouveauté*, *nouveauté*, *nouveautés*, *nouveautés*; *courtvetu*, *courtvetue*, *courtvetus*, *courtvetues*, &c. But compound adjectives which denote shades of colour having become, by an ellipsis, really invariable substantives, will be treated as invariable words; e.g., *des robes bleu clair*, *vert d'eau*, &c., just like *des habits marron*.

INVARIABLE PAST PARTICIPLES.—At present the participles *approuvé, attendu, ci-inclus, ci-joint, excepté, non compris, y compris, été, passé, supposé, vu*, when placed before the substantive to which they are joined, are invariable. And indeed *excepté* is already classed among the prepositions. The agreement of these participles will be made optional, and the application of different rules—according to whether they are placed at the beginning or in the middle of the clause, and whether they define the substantive or not—will not be insisted upon; e.g., *ci joint* or *ci jointes les pièces demandées* (without hyphen between *ci* and the participle); *je vous envoie ci joint* or *ci jointe copie de la pièce*.

The same freedom will be allowed in the case of the adjective *franc*; e.g., *envoyer franc de port* or *franche de port une lettre*.

AVOIR L'AIR.—*Elle a l'air doux* or *douce, spirituel* or *spirituelle* may be written indifferently. No knowledge will be demanded of any subtle difference of meaning arising from the agreement of the adjective with the word *air* or with the person described.

NUMERAL ADJECTIVES.—*Vingt, cent*. The existing rule by which these two words are put in the plural when they are multiplied by another number is justified in certain cases by the pronunciation. The plural of *vingt* and *cent* will be allowed even when these words are followed by another numeral adjective; e.g., *quatre vingt* or *quatre vingts dix hommes*; *quatre cent* or *quatre cents trente hommes*.

The hyphen between the word denoting the units and that denoting the tens will not be insisted on; e.g., *dix sept*.

In dates of the Christian era *mille* will be accepted instead of *mil*, as in ordinary numbers; e.g., *L'an mil huit cent quatre vingt dix* or *l'an mille huit cents quatre vingts dix*.

DEMONSTRATIVE AND INDEFINITE ADJECTIVES AND PRONOUNS.

CE.—The particles *ci* and *là* may be added to the preceding pronoun without making any distinction between *qu'est ceci*, *qu'est cela*, and *qu'est ce ci*, *qu'est ce là*. In these expressions the hyphen may be omitted.

MÊME.—*Même* following a plural substantive or a pronoun may be made to agree, and no hyphen between *même* and the pronoun is necessary; e.g., *nous mêmes, les dieux mêmes*.

TOUT.—*Tout* may be made to agree with the name of a town which it precedes, and no attempt will be made to establish a somewhat subtle distinction between such constructions as *toute Rome* and *tout Rome*.

It will not be counted as a mistake to write without any difference of meaning, when it is a woman who is speaking, *je suis tout à vous* or *je suis toute à vous*. When *tout* is used with the indefinite sense of *chaque*, it may, with its accompanying substantive, be written either singular or plural without

altering the meaning; e.g., *des marchandises de toute sorte* or *de toutes sortes*;—*la sottise est de tout (tous) temps et de tout (tous) pays*.

AUCUN.—This word may be used with a negative either singular or plural; e.g., *ne faire aucun projet* or *aucuns projets*.

CHACUN.—When this pronoun follows the verb and refers to a plural subject or object either of the possessive adjectives, viz., *son, sa, ses*, or *leur, leurs*, shall be allowed after *chacun*; e.g., *Ils sont sortis chacun de son côté* or *de leur côté*;—*remettre des livres chacun à sa place* or *à leur place*.

VERBS.

COMPOUND VERBS.—The omission of the apostrophe and of the hyphen will be allowed in compound verbs; e.g., *entrouvrir*, *entrecroiser*.

HYPHEN.—The omission of the hyphen between the verb and the pronoun-subject following the verb will be allowed; e.g., *est il*.

DISTINCTION BETWEEN THE APPARENT SUBJECT AND THE REAL SUBJECT—e.g., *sa maladie sont des vapeurs*.—There is no occasion to teach rules for such constructions as this, for their study can only be profitable when they occur in the text which is being read and explained. It is not a question of grammar but of style, and should find no place in elementary school work or in examinations.

CONCORD OF THE VERB PRECEDED BY SEVERAL SUBJECTS NOT JOINED BY THE CONJUNCTION *et*.—If the subjects are not summed up in an indefinite word such as *tout, rien, chacun*, the verb may always be put in the plural; e.g., *sa bonté, sa douceur le font admirer*.

CONCORD OF THE VERB PRECEDED BY SEVERAL SUBJECTS IN THE SINGULAR JOINED BY *ni, comme, ainsi que*, AND OTHER SIMILAR EXPRESSIONS.—The verb will always be allowed in the plural; e.g., *Ni la douceur ni la force n'y peuvent rien* or *n'y peut rien*;—*La santé comme la fortune demandent à être ménagées* or *demande à être ménagée*. *Le général avec quelques officiers sont sortis* or *est sorti du camp*;—*Le chat ainsi que le tigre sont des carnivores* or *est un carnivore*.

CONCORD OF THE VERB WHEN THE SUBJECT IS A COLLECTIVE NOUN.—Whenever the collective is accompanied by a plural complement the verb may agree with the complement; e.g., *Un peu de connaissances suffit* or *suffisent*.

CONCORD OF THE VERB WHEN THE SUBJECT IS *plus d'un*.—Since the existing practice is to make the verb singular to agree with its subject *plus d'un*, it will be permissible to do so even

when *plus d'un* is followed by a plural complement; e.g., *Plus d'un de ces hommes était* or *étaient à plaindre*.

CONCORD OF THE VERB PRECEDED BY *un de ceux* (*une de celles*) *qui*.—When should the verb in the relative clause be plural and when singular? This is a nicety of language, and no attempt will be made to introduce it into school work or examinations.

C'EST, CE SONT.—As great diversity of custom exists as to the exact use of *c'est* and *ce sont*, and as the best authors have used *c'est* to introduce a plural subject or a pronoun in the third person plural, the use of *c'est* instead of *ce sont* shall always be permitted; e.g., *c'est* or *ce sont des montagnes et des précipices*.

SEQUENCE OF TENSES. — The present subjunctive will be allowed instead of the imperfect in subordinate clauses dependent upon clauses in which the verb is in the conditional present; e.g., *Il faudrait qu'il vienne* or *qu'il vînt*.

PARTICIPLES.

PRESENT PARTICIPLE AND VERBAL ADJECTIVE.—The general rule should be observed, by which the participle is distinguished from the adjective, in that the former denotes *action* and the latter *state*. It is sufficient for pupils and candidates to give evidence of common sense in doubtful cases. Subtleties must be carefully avoided in setting exercises; e.g., *Des sauvages vivent errant* or *errants dans les bois*.

PAST PARTICIPLE.—No change is to be made in the rule by which the past participle must agree with the word it qualifies when it is used as an epithet, and with the subject when it is a complement to the verb *être* or when it is an intransitive verb conjugated with *être*; e.g., *Des fruits gâtés*; *ils sont tombés*; *elles sont tombées*.

As for the past participle with the auxiliary verb *avoir*, when it is followed either by an infinitive or by a present participle or another past participle, it may remain invariable, whatever the gender and number of the objects which precede; e.g., *Les fruits que je me suis laissé* or *laissés prendre*; *les sauvages que l'on a trouvé* or *trouvés errant dans les bois*. When the past participle is preceded by a collective noun it may be made at choice to agree with the collective or the noun dependent on it; e.g., *La foule d'hommes que j'ai vue* or *vus*.

ADVERBS.

NE IN SUBORDINATE CLAUSES.—The use of this negative in a great number of subordinate clauses gives rise to complicated, difficult, and incorrect rules, often at variance with the usage of the most classical writers,

Regardless of whether the clauses on which they depend are affirmative, negative, or interrogative, the omission of *ne* will be permitted in subordinate clauses dependent on such verbs or phrases as:—*Empêcher, défendre, éviter que, &c.*; e.g., *Défendre qu'on vienne* or *qu'on ne vienne*; *Craindre, désespérer, avoir peur, de peur que, &c.*; e.g., *De peur qu'il aille* or *qu'il n'aille*. *Douter, contester, nier que, &c.*; e.g., *Je ne doute pas que la chose soit vraie* or *ne soit vraie*. *Il tient à peu, il ne tient pas à, il s'en faut que, &c.*; e.g. *Il ne tient pas à moi que cela se fasse* or *se fasse*.

In like manner the omission of *ne* after comparatives or words implying comparison will be permitted: *autre, autrement que, &c.*; e.g., *L'année a été meilleure qu'on l'espérait* or *qu'on ne l'espérait*;—*les résultats sont autres qu'on le croyait* or *qu'on ne le croyait*.

Likewise after the phrases *à moins que, avant que*; e.g., *à moins qu'on accorde le pardon* or *qu'on n'accorde le pardon*.

NOTE.

In examinations, mistakes which prove no want of intelligence or real knowledge on the part of candidates, but only show ignorance of some nice point or grammatical subtlety, must not be counted as serious.

Approved as a schedule to the decree of February 26th, 1901.

The Minister for Public Instruction and Fine Arts.

GEORGES LEYGUES.

PRIMARY EDUCATION IN THE NETHERLANDS.

I. NOTE ON THE BIBLIOGRAPHY OF DUTCH PRIMARY EDUCATION.

II. PRIMARY EDUCATION IN THE NETHERLANDS ; A SHORT HISTORY OF THE SCHOOL LEGISLATION FROM 1798-1889.

Chronological Table :—Political Events in the Netherlands :
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Appendices :

- A. The Ministerial Circular of May 30, 1806, together with some
of the answers made by the various religious bodies.
- B. Four details in regard to Dutch Schools, 1800 to 1840.
 - (i.) Labarre's " phonic method," 1802.
 - (ii.) The " Simultaneous " method of Instruction, 1830-1840.
 - (iii.) School furniture, 1838 and 1850.
 - (iv.) Class-divisions in a Dutch primary school, 1830-1840.
- C. Bible Teaching in Dutch primary schools. Extracts from
an article in Schmid's *Encyklopädie*.
- D. Some generalisations about the effects of Dutch primary
education upon the national character, by Prof. Alphonse
Leroy, of the University of Liège, 1860.

III. THE PRESENT SYSTEM OF PRIMARY EDUCATION IN THE NETHER- LANDS.

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V. APPENDICES :

- (i.) RECENT EDUCATIONAL LEGISLATION IN THE NETHERLANDS.
 - A. Compulsory Education Law, July, 1900.
 - B. The Primary Instruction Law of 1889.
 - C. The Education Law of 1857, clauses relating to
Primary Instruction.
- (ii.) NOTE ON AN INFANT SCHOOL IN AMSTERDAM, FOUNDED IN
1830 BY THE SOCIETY OF FRIENDS.

PRIMARY EDUCATION IN THE NETHERLANDS.

I.

NOTE ON THE BIBLIOGRAPHY OF DUTCH
PRIMARY EDUCATION.

In 1810, on the abdication of Louis Bonaparte after four years' reign as King of Holland, the Netherlands were added to the French Empire, and an Imperial decree of Oct. 18th directed that two Councillors of the Imperial University of France should proceed to Holland and report on the state of education in that country. The mission was entrusted to Cuvier, the famous naturalist, and Noël, Inspector General of the University, and the result of their visit was a report read to the Council of the University, the first part of which deals with primary education in Holland.* Besides a short account of the state of education in Holland before the Government had assumed a partial control through the agency of national education established in 1801, Cuvier's report contains an account of the steps that led to the law of 1806, and an estimate of the results achieved by that law during the first four years of its operation. Details are given in regard to the general regulations issued by the Minister of the Interior, the special codes of regulations drawn up by the provinces, and some of the town codes. Cuvier shows that in 1806 all such regulations then in existence as were in no respect at variance with the new system were continued in force. He also describes the work of the district inspectors, and deals at some length with the supply of, and the provision for, teachers. He notices that co-education, as it is now called, was the general rule; and attempts to classify the various grades and types of school that together composed the national education of the country at a time when their co-ordination had but just begun. Near the close of the first part of Cuvier's report will be found these words, "From all we have now stated it will be evident that the whole system of primary instruction in Holland is founded upon three bases, strongly connected and mutually dependent upon each other, namely, the excellence and respectable condition of the masters, the active superintendence of inspectors, and a constant vigilance to render the methods of instruction more and more perfect."

That part of Cuvier's report which deals with primary education will be found translated in Appendix D. of Mr. Leonard Horner's book, which must next be noticed.

* "*La conclusion c'est qu'il serait très avantageux d'introduire en France une organisation semblable.*"—Buisson. Art. "*Pays-Bas*" in the "*Dictionnaire . . . d'Instruction Primaire.*"

Twenty-five years after Cuvier's visit, in 1836, Victor Cousin went to the Hague to complete the series of studies he was then making of the educational condition of various countries. His work was soon made known in England and had a considerable influence on the opinions of those who worked for the education of the people in the 'thirties. Mr. Leonard Horner, one of H.M. Inspectors of Factories, followed the example set by Sarah Austin's translation of Cuvier's work on Prussian schools by translating that part of Cousin's report on Holland which dealt especially with primary schools. This he supplemented with the translation of Cuvier's report which has just been noticed, the text of the law of 1806, and the regulations with regard to religious instruction then in force. Horner's introduction to the whole book contains a criticism of Lord Brougham's abortive Education Bill of June and December, 1837, and a general survey of the educational needs of England.

The book is entitled "On the State of Education in Holland, as regards Schools for the Working Classes and for the Poor, by M. Victor Cousin, translated, with preliminary observations on the necessity of legislative measures to extend and improve education . . . in Great Britain and on the course most advisable to pursue at the present time, by Leonard Horner, Esq., F.R.S." (London: John Murray, 1838.)

Another translation of certain portions of Cousin's Report will be found in the second publication (1838) of papers by the "Central Society of Education." Mr. B. F. Duppa's translation comprises Cousin's remarks on religious instruction, on the "mutual" and "simultaneous" methods of teaching, and, more particularly, on the Day Normal School at Haarlem and the work of its director, M. Prinsen.

The next work of importance on the history of Dutch Education is the report made by Matthew Arnold to the Education Commission of 1861. He bases his account of the early years of public instruction in Holland upon the work of Cuvier and Cousin. Arnold's essay should be read by all who are interested in the subject, and, it should be added, by all who care to trace the influence of foreign systems of education upon our own. It is written with the lucidity for which his work is always remarkable and without the *doctrinaire* iteration by which it is sometimes disfigured. His estimate of the Dutch education of that time appears on the first page of his report. "The popular instruction of other countries," he says, "has grown up since that time (1811); but I have seen no primary schools worthy to be matched, even now, with those of Holland. Other far more competent observers have come to the same conclusion." He gives an admirable account of the causes which led to the change in the school system made by the law of 1857. When he wrote this law had been in operation for two years only, so that Arnold's judgment upon it is necessarily tentative and incomplete. It is, however, of great interest as an example of Matthew Arnold's insight, even though its value as history be small. The

last section of the report begins with these words: "Such in Holland is the present excellent situation of primary instruction. In Prussia it may be even somewhat more widely diffused; but nowhere, probably, has it such thorough soundness and solidity. It is impossible to regard it without admiration." The essay concludes with some brilliant pleading for the regulation of education in England by the State.

Matthew Arnold, in his detailed account of the causes of the change made in 1857, relied almost entirely upon a book by Emile de Laveleye published in 1858, "*Débats sur l'Enseignement Primaire dans les Chambres Hollandaises, session de 1857*."* The title naturally suggests that the book is a kind of Dutch "Hansard" in French, or else a piece of better-class journalism; and in consequence few people have taken the trouble to refer to it. In reality, it is very much more—a reasoned, philosophic account of general principles to be observed, in the writer's opinion, in the settlement of the educational difficulties then common to all the more advanced countries of Europe, with a particular application to the debates on the law of 1857 in Holland. "One of the principal difficulties involved in the organisation of primary education is the question of the relations between the school, the Church, and the State, a question which is now (1858) the order of the day, not only in Holland, Belgium, and France, but also in Germany, in Piedmont, in Portugal, and in England, and indeed wherever the instruction of the people is a matter of public concern."†

Such is the point of view from which de Laveleye analyzes the religious difficulty in Dutch education. It is a valuable book besides, inasmuch as it gives a most interesting selection from the speeches made in the Dutch Chambers. Matthew Arnold's impression of the debates and of de Laveleye's book upon them may be gathered from the following passage.‡ "The law of 1857 raised the question (of the 'neutral' school). Never, perhaps, has it been better discussed than in the debates which followed the introduction of that law into the Dutch Chambers. It does honour to Holland that she should have for her representatives men capable of debating this grave question of religious education so admirably. I greatly doubt whether any other parliamentary assembly in the world could have displayed, in treating it, so much knowledge, so much intelligence, so much moderation. . . . A most interesting account of the discussion has been published in the French language by M. de Laveleye, a Belgian, and a warm partisan of the cause of the neutral school; I strongly recommend the study of his book to all who desire to see the question of religious education fully debated."

Fourteen years later, in 1872, the same writer, then member of the Academy of Belgium, and correspondent of the Institute

* Published by Eugene Vanderhaeghen at Ghent, 1858.

† Laveleye, *op. cit.*, p. 2.

‡ Education Commission of 1861, vol iv., p. 144.

of France, published his copious work, "*L'Instruction du Peuple*" (Paris, Hachette, 1872). The book contains about fifteen pages upon primary education in the Netherlands (pp. 245 to 262). When he wrote, the changes made in the educational system by the law of 1857 had been tested by the somewhat stormy experiences of 15 years.

In 1894, M. Romain Moyersoen published among the papers of the Louvain "School of political and social sciences" a most valuable work, entitled "*Du régime légal de l'enseignement primaire en Hollande.*" (1895. Paris, Larose. Ghent, Engelcke.) The book contains, besides an excellent review of the educational legislation from 1801 to 1889, a detailed description of the system established in 1889, and of the then state (1894) of education both public and private. It concludes with M. Moyersoen's estimate of the effects upon political parties produced by the settlement of 1889.

The work of M. D. de Loos (1898) may be said to supplement, from a different point of view, and not without partiality or bias, the historical account given by M. Moyersoen. His *aperçu historique* is, however, of great interest and considerable value. The book, as a whole, is overloaded with details largely statistical. The title of it reads thus: "*Organisation de l'Enseignement primaire dans le royaume des Pays-Bas par Dr. D. de Loos, Directeur de l'école moyenne supérieure de Leyde.*" It was published in 1896 at Leyden, by Eduard Ydo; but copies of it can be obtained only by applying to the author, Leyden, Holland.

In Buisson's "*Dictionnaire d'Instruction Primaire*" will be found an excellent summary, but it ends with the year 1883. Buisson, or rather, the writer of the article "*Pays-Bas*," gives a most admirable account of the state of Dutch education before the efforts of the Society for the Public Good had produced their full effect. His history of the legislative changes is, perhaps, overloaded with quotations from speeches made in the debates, and contains little that is new to those who have read Cuvier, Cousin, Matthew Arnold, and de Laveleye. But he gives really valuable information on certain points, notably the "neutral" character of the schools maintained by the great Society, and the changes made in 1857 and again in 1878 in the system of school inspection.

Finally, those who desire to ascertain what influence Holland exercised upon the development of primary education in England should refer to Sir James Kay-Shuttleworth's "*Four Periods of Public Education.*" The book was not published until 1862, but many of the chapters which compose it were written considerably earlier. He writes of Dutch education with much admiration and is at no pains to conceal the special prejudices he entertains in favour of State interference in educational matters, and of the undenominational character of schools supported by the State. On certain points such as

inspection, and, of course, the pupil-teacher system, his remarks are particularly full and appreciative.

The same writer when he was Dr. James Kay gave some interesting details about the methods of instruction and the arrangement of school furniture used in Dutch primary schools in one or two of his Poor Law reports. In particular, the Poor Law Commissioners' "Reports on the training of pauper children," presented in 1838 and 1841 should be consulted.

The work of M. Steyn-Parvé entitled "*Instruction Primaire, secondaire, et supérieure en Hollande*" (Leyden. Stijhoft. 1878, pp. 1-32) contains a lucid account of the legislation in regard to primary education from 1801 to 1857.

Two articles written by "A Dutch Clergyman," obviously a Protestant, in the "Contemporary Review" during 1868, have a particular interest. The writer thought that the history of school instruction in Holland might be of service in England at that time. Two years before the Elementary Education Act of 1870, this Dutch writer asks the questions "Are denominational schools desirable? Is religious teaching with a conscience clause commendable?"

This note on the bibliography of the subject must not be concluded without mention of a book entitled "Elementary and Middle-Class Instruction in the Netherlands, and their development in accordance with the law of 13th August, 1857 (Elementary Instruction), and 2nd May, 1863 (Middle-Class Instruction)." It is in English; with here and there unmistakable signs that it has been translated by someone more intent upon preserving the idiom of the original (with which, probably, he was the more familiar) than upon making the English translation readable (see below, pp. 391, 392). But it bears the royal arms of the Kingdom of Holland and the inscription "Published by the Royal Commission of the Netherlands."* The book was printed and published by A. W. Sythoff (or Stijhoft) at Leyden in 1876.

It is of great value on one or two points of detail, particularly upon the whole question of school attendance, and the attempts that were made in the 'sixties and 'seventies to secure a more regular attendance by "moral suasion" rather than by legislative interference. The book also contains excellent statistics that show the working of the educational system established in 1857, during the period from 1858 to 1873.

The historical account of Dutch education which here follows has been based upon the works mentioned above. But it is only right to say that M. Moyersoen's book has been used more extensively than any other. This is true of each of the three papers on Dutch primary education which follow, but notably of the last. The description there given of the present system

* Possibly the book was prepared by a Royal Commission for the purpose of the Philadelphia International Exhibition of 1876.

in Holland has been almost entirely taken from the work of M. Moyersoën.

NOTE — (a) Besides the above mentioned works most of the following English documents, articles, books, &c., bearing on primary education in Holland, may be consulted at the Board of Education Library, St. Stephen's House, Cannon Row, Whitehall, London.

Barnard, H., National Education. Systems, Institutions, and Statistics of Public Instruction in different Countries. 1872. Pp. 401 to 463, including a Report by Prof. Alphonse Leroy, of the University of Liège, 1860.

Barnard, H., National Education in Europe, 1854, pp. 595 to 618, with extracts from Bache's "Report on Education in Europe," 1838, and from W. E. Hickson's "Account of the Dutch and German Schools," 1840.

Barnard, H., Reformatory Education. 1857.

Hickson, W. E., Dutch and German Schools. Account of the present state of Education in Holland, Belgium, and the German States. 1840.

Anglican Church Magazine, 1898-9. Series of articles on Religious instruction in Continental elementary schools. Religious instruction in the elementary schools of Holland—Rotterdam, by *N. S. Milner Atkinson*. 1898.

Board of Education, Special Reports on Educational Subjects, Vol. iii. The teaching of modern languages in Belgium and Holland, by *Miss J. D. Montgomery*. 1898.

Dr. Yates. A Brief Outline of the System of Public Instruction in the Netherlands. *Journal of the Society of Arts*, February, 1868.

Foreign Office. Diplomatic and Consular Reports, 1900. Annual Series, No. 2386. Finances of the Netherlands for the year 1899-1900.

Manual and Practical Instruction (Ireland) Commission, 1897-82. Appendices. Report on Manual Training in Schools in North Germany and Holland, by *A. Purser*. 1898.

O'Malley, Rev. Thaddeus, A sketch of the state of Popular Education in Holland, Prussia, Belgium, and France. 2nd edition. 1840.

United States Bureau of Education, Circulars of Information. No. 2. 1877. Reports on the Systems of Public Instruction in Finland, the Netherlands, etc. 1877.

United States Bureau of Education. Report of the Commissioner, 1894-95, Vol. I: Education in the Netherlands, by *Sophia Nussbaum*. 1896.

The Education Question in Holland, By a Dutch Clergyman. (*Contemporary Review*, vols. 7 and 8.) 1868.

Lecky, W. E. H., Democracy and Liberty, vol. ii. p. 70 foll. (New Edition, 1899.)

Notes from the Netherlands. (*Chambers's Edinburgh Journal*, vols. xiv. and xv.) 1850-51.

b. Besides the French books on Dutch primary education noticed above in the bibliographical note, the following French works may also be consulted at the Board of Education Library :—

Fachon, Marius. Rapports à M. le Ministre de l'Instruction Publique et des Beaux-Arts sur les Musées et les Ecoles d'Art Industriel et sur la Situation des Industries Artistiques en Belgique et en Hollande. 1888.

Danhguser. Rapport sur l'organisation de l'Enseignement Musical dans les Établissements d'Instruction Publique de Belgique et de Hollande. (Département de la Seine.) 1881.

Narjoux, Félix. Les Écoles Publiques. Construction et Installation en Belgique et en Hollande. 1878.

Bernard's "La Hollande" should also be consulted by those who wish to understand modern Dutch politics. The chapter on public education was contributed by M. Gustave Lejeal. (Paris, Larousse). 1899.

Lacheret, E. Choses de Hollande. La Question Scolaire pp. 59-82 (Paris, Fischbacher). 1893.

c. The following official reports in Dutch may also be consulted at the Board of Education Library :—

Verslag van den Staat der Hooge, Middelbare en Lagere Scholen in het Koninkrijk der Nederlanden. 1816-1840; 1841-45; 1854-55; 1856-57; 1857-58; 1867-68 to 1869-70; 1875-76; 1879-80; 1881-82; 1892-93 to 1894-95; 1899-90 to 1898-99.

There are also several works in Dutch of which no list need here be given.

*** A description of Education in Holland by Mr. J. C. Medd will appear as a supplement to Volume 8 of "Special Reports on Educational Subjects."

II.

STATE PRIMARY EDUCATION IN THE NETHERLANDS

A SHORT HISTORY OF THE SCHOOL LEGISLATION FROM
1798—1889.

It is somewhat difficult to determine at what precise date the primary schools of Holland became in any sense State schools. If this historical essay pretended in any degree to completeness it would of necessity begin with an account of the Dutch schools in the early years of the seventeenth century. It would necessarily explain that after the Dutch had delivered themselves from the dominion of Spain and had renounced their spiritual allegiance to the Holy See, the schools became in a sense State institutions; while, on the other hand, the Dutch Republic, as a loyal child of the Reformation, was so thoroughly religious and Protestant a State that the schools, though institutions of the State, were more concerned to inculcate religion than anything else. Such a complete history would proceed to quote various decrees of the Government on the subject of schools and schoolmasters and their duty to secure that "the youth be well taught and trained in the fear of God"; and particular attention would be paid to the decree of 1612 in which such a religious education was described in detail. It would explain that after 1619 when, through the Synod of Dordt, the Church was formally united to the State, the Government entrusted the supervision and direction of the schools to the clergy and enjoined them to "keep an accurate survey of the schools, and to visit both the public and the private schools . . . in order to incite the schoolmasters and the children to zeal and godliness." The conscientious historian would then describe how the secular teaching in the schools was gradually sacrificed more and more to the religious teaching, which itself tended to degenerate into an unlovely if orthodox formalism; how the clergyman, who had many other duties besides the care of schools, neglected this duty more and more, until the people had lost all interest in an education that comprised little but religious teaching, and that in a form anything rather than attractive; how the intellectual movements of the time, and especially the humanistic theory of Rousseau, affected first the upper stratum of Dutch life and finally penetrated, as all intellectual influences must penetrate to some extent, the primary school; how, in consequence, religion was in danger of final expulsion from the schools which became, when the Church was severed from the State in 1795, institutions of the State in a new sense reflecting the social and political theories of the governing

classes and regarded by them as an instrument of progress in the direction of the goal suggested by the doctrines of the French Revolution.

All this intricate history would have to be set forth by anyone who pretended to completeness: but in point of fact, for the understanding of the present system of primary education in Holland, it is only necessary to go back to the last forty years of the eighteenth century. During that period it is possible to trace the origin and the influence of certain ideas that culminated finally in the first legislative enactment of State Primary Education in 1806.

"Thirty years ago," wrote Cuvier in 1811, "the inferior schools of Holland resembled those of the same class in other countries. Masters, nearly as ignorant as the children they had to teach, succeeded with difficulty to impart, in several years, a slender amount of instruction in reading and writing to a small number of scholars. There was no general superintendence of the schools; the most of them were set up on private speculation; the different religious sects maintained several for their poor, under the supervision of their deacons; but these schools were exclusively for the children of the parish; those whose parents did not belong to some particular church were not provided for; the Catholics had no schools of the sort, although so numerous in the country; and, as the deacons of the Reformed churches go out of office by rotation, their superintendence was not directed by any settled principles. The result of all these circumstances was that a large proportion of the young were sunk in ignorance and immorality."

A similar judgment was passed by M. Steyn Parvé upon the state of Dutch education towards the end of the eighteenth century.* "Primary education in the Netherlands was pretty much in the same situation as everywhere else in Europe at the same time. That is to say, the method of instruction, being purely mechanical, was more adapted to stifle than to stimulate the intelligence of the pupils; the school books were very imperfect; the teachers as a general rule lacked the knowledge necessary for the accomplishment of their difficult task: their financial position and their needs were altogether disproportionate; and there was practically no interest taken by the greater number of parents in the education of their children. Moreover, no general law regulated the primary and secondary schools, nor even the higher education given by the Universities."

But no country in Europe is in a position to employ this state of things in Holland in the last century as a historical reproach against her. If schools were bad at that time in Holland there were some countries in which they were worse and none in which they were remarkably better. Matthew Arnold, whose authority is Cuvier's report, is at pains to make a two-edged compliment to Dutch Protestantism. At any rate, he says,

* "*Instruction primaire, secondaire, et supérieure en Hollande*" (p. 1). 1878. Stijlhof, Leyden.

Protestantism in Holland built schools for the children of its own communion, while there were no schools whatever in connection with the Roman Catholic churches. But towards the end of the eighteenth century "the Dutch schools for the poor resembled those of all other countries, that is to say they were exceedingly bad. It is remarkable that even in Holland, even in a stronghold of Protestantism—that Protestantism which is commonly thought to have done so much for the instruction of the people—primary schools should, by explicit testimony, be declared to have been, eighty years ago, thus inferior. . . . Protestantism had, in truth, the zeal to found schools, but it had not the knowledge to make good schools."*

"There was no provision for the training of teachers; the schoolmasters were ignorant, and the instruction beggarly."† The following pages will show that it was a voluntary association that really altered this state of things and finally pointed the way along which the State should proceed first to the encouragement, and then to the control of national education.

Sir James Kay-Shuttleworth‡ speaks of the influence of the central European States, and of Switzerland in particular, as having helped to produce the system of State Education in Holland:—"The institutions of the central States of Europe for the promotion of primary education procured, at an early period in the Batavian Republic, spontaneous efforts from a sagacious people for the training and instruction of the poorer classes. The direct interference of the Government was reserved for the present century; and this is in no slight degree to be attributed to the labours of Pestalozzi§ in Switzerland, which called forth similar exertions from Van der Ende, from Prinsen, and from Falk."

One writer|| finds the first impulse of the movement for *public* education in certain questions proposed for competitive discussion among its members by the Netherlands Scientific Society (*Société Néerlandaise des Sciences*). The first question of this nature was propounded in 1760 and dealt with the physical education of young children; and the second, in 1763, referred to the intellectual and moral education of children as directed

* Report of the Education Commission, 1861, vol. iv., pp. 134, 135.

† *Ibid.*, p. 135.

‡ "Four Periods of Education," p. 217 (Second Period). Published in 1862.

§ Elsewhere ("Report on the Training of Pauper Children and on District Schools," 1838), the same writer speaks of . . . "The methods of Pestalozzi, as reduced to practice by M. Prinsen in the schools of Holland" (p. 47).

|| Dr. D. de Loos. "Organisation de l'Enseignement Primaire dans le royaume des Pays-Bas," 1896. Cf. also Barnard, "National Education in Europe, 1854," p. 595; and Prof. Alphonse Leroy, in Barnard's "Systems . . . of Public Instruction," p. 407.

towards a double object, their usefulness as citizens and their happiness as individuals.* Some fifteen years later a question dealing more directly with the organisation of education was proposed for discussion by the Society of Zeeland (*Zeeuwsch Genootschap*). This question, vague and general though it is, shows that so early as 1779 it was felt by a certain number of the better educated portion of the nation that an improvement in the common schools of the country was necessary if the standard of general culture in Holland was to be raised.†

But it was the "Society for promoting the public welfare" (*Société du Bien Public*) that actually set the example of definite educational effort. It was founded in 1785 at Edam and developed very rapidly. From the first it performed the useful task of bringing home to the public mind the defects of the national education; and, under its encouragement and influence, many new schools were organised with improved principles and methods of instruction. Some of the local departments of the Society established schools for the poor in which instruction was given absolutely free of charge. The Society also founded a Normal School at Groningen, which lasted until 1857, when it was transformed into a public school.

The writer of the article on the Netherlands in Buisson's *Dictionnaire de Pédagogie et d'Instruction Primaire*, brings into its due prominence a point in connection with the Society for the Public Good which has been ignored almost completely by other writers. "A distinctive characteristic of the schools created or encouraged by the Society was their *neutral* character in regard to religion; from the first, the Society declared its intention of remaining independent of all religious sects and of all political parties. Children of all confessions were admitted into the Society's schools, and teachers in them were forbidden to give any instruction in dogma. Thanks to the influence of the Society for the Public Good, which numbered in its ranks all the advanced men of the country, the principle of the neutrality of schools was shortly to be inscribed in the law; and it has never ceased since that time to lie at the root of the system of public primary education in the Netherlands."

A "Dutch Clergyman," writing in 1868 of "The Education Question in Holland," ‡ describes the religious attitude of the great Society as follows:—"It professes to be a Christian institution, and excludes Jews from its membership. In the days of its origin, however, it meant by the term Christianity little more than Rousseau's natural religion." While it was not "averse to

* "Comment faut-il conduire l'esprit et le cœur d'un enfant, pour qu'il devienne un jour un homme utile et heureux?"

† "Quelle amélioration faut-il aux écoles communales ou publiques spécialement aux écoles Néerlandaises, pour accroître la civilisation de notre nation? Quelle est la manière la plus avantageuse de l'introduire et de la maintenir?"

‡ *Contemporary Review*, vols. vii, and viii.

religion being introduced into the schools and recommended in the school books," a clear idea of what the Society meant by religion may be gathered from the memorial presented to the National Assembly in 1796. We shall have occasion to speak of this memorial presently as well as of the "General Ideas upon National Education," which the Society contributed to the labours of the Commission appointed to deal with the suggestions made in the memorial. Meanwhile some words in the memorial itself will show that the religious principles of the leaders of the movement for national education were identical with those set forth in the famous "Republican Catechism" which the National Assembly barely refrained from imposing on the schools of the country in the last years of the eighteenth century. "In our opinion," the memorialists say, "it is desirable that the instruction in the national religion should consist in a simple exposition of natural religion unmixed with any dogmatic system."*

An acknowledgment of the great Society's influence upon the legislation of 1806, and, in particular, upon its provisions as to religious instruction and the religious bodies, is made at the beginning of the report on "Elementary and Middle-Class Instruction in the Netherlands," put forth by the Royal Commission of the Netherlands in 1876. "When, in the beginning of the present century, the Batavian Republic had taken instruction under its special protection, and endeavoured to promote its establishment by Publications based entirely on the liberal principles advocated and promulgated by the Society for the Public Good, *which tended especially to render the school entirely independent of ecclesiastical influence*, the first School Law was passed on the 3rd of April, 1806."†

"Education . . . was always the great object of the thoughts and labours of the Society for the Public Good, and the history of its achievements in this matter may be divided into three distinct branches: first, the researches to which it gave rise, on the physical education of children, upon the best methods of teaching, and upon moral education; secondly, the elementary books which were published to assist in carrying those methods into practice; and thirdly, the schools which were established, not with the view of retaining them under their own direction, and still less of taking possession of primary instruction, but to supply, in the meantime, to the ordinary schools models by which they might improve their systems.‡ . . . Labours so varied and so extended, could not fail to have an influence upon the improvement of public education; but that influence would have probably remained for ever feeble, precarious, or at least confined to certain districts, without the powerful intervention of the Government. . . . This was at first partial only. . . .

* Quoted in the *Contemporary Review*, vol. vii., p. 391.

† *Op. cit.*, p. 1. The italics are not, of course, in the original.

‡ In 1797 the magistrates of Amsterdam erected schools for the poor, with plans and with methods suggested by this Society.

But in 1801, 1803, and 1806, the Government testified its respect for the Society by following the advice of several of its members in the measures which it adopted at these several periods for the improvement and general organisation of primary instruction.”*

It was not, however, until 1796, that any attempt was made to direct the attention of Government to these matters. In that year a group of men presented to the National Assembly some suggestions for a proposed enactment of State education. The suggestions were referred to a Commission, and the Commission naturally called upon the “Society for the Public Good” for information. The fifteen questions put by the Commission to this society gave it the opportunity of largely determining what character the Government’s organisation of schools should take; for the answers it gave to the Commission were treated with the respect to which its honourable record in educational effort entitled it.† The result was the creation of an agency, or, rather, an agent of national education,‡ with functions of an advisory rather than administrative nature.

The law of 1801 may be said to have proceeded from the agency established by Article 92 of the new Constitution of 1798. And thus, in less than three years, the indirect connection between the State and national education was made direct.

The new law laid it down that there should be an adequate number of schools in every district, although it left their organisation to the *communes*. The direct connection then established between the central authority and the schools took two forms—inspection, and the assistance by Government grants of teachers who possessed certain qualifications fixed by Government.

But the legislation of 1801, even with the improvements effected in it in 1803, could not long satisfy the educational needs of the nation. It soon became obvious that, side by side with the assistance now given by Government to the schools of the country (or, more accurately, to the teachers in them), there must be a more direct control exercised by the State. Accordingly, the law of 1806 effected a centralisation which may well be regarded as unfortunate in the light of subsequent difficulties.§

Meanwhile certain changes of administration had prepared the way for an effective central authority for education. In 1805 Schimmelpenninck, the Grand Pensionary under the

* Cuvier in Horner’s “Education in Holland,” pp. 263, 264.

† The answer was entitled “*Algemeene Denkbeelden over het National Onderwijs*”—“General Ideas upon National Education.”

‡ *Agent d’Education Nationale*. The first to hold this office was the Rev. Dr. J. H. Van der Palm, Professor of Theology at the University of Leyden, “a learned Oriental scholar, an eloquent orator, and a most classical writer.”

§ “Ces lois (1801, 1803) n’avaient pu exercer que peu d’influence sur l’instruction . . . la nouvelle loi (1806)—peut être considérée comme une édition modifiée et perfectionnée.”—Steyn Parvé, p. 2.

new Constitution, abolished the Ministry of the Interior, and appointed instead a Secretary of State, to whom he assigned the care of public instruction. To assist in the duties of this department of public education, M. Van der Ende was made Assistant Secretary. To this distinguished man and to M. Van der Palm, the famous Orientalist, who really began the governmental administration of schools in 1799, 1801, and 1803, the title of "fathers of public instruction," has been given. M. Van der Ende remained at the head of the new Government Department until 1833.

With the year 1806 begins what may be called the modern period of Dutch national education—modern, because the characteristic of education in this century is its direct connection with a central office of the State. The *régime* of 1806 lasted until 1857; and, in fact, no fundamental change was made until 1889 when something very like a final settlement of the religious problem was effected.

An account of the educational history of Holland in this century, however brief and however impartial it might be, could not be so written as to exclude all mention of the religious question. It has always been the centre of educational controversy in Holland, and it will accordingly provide the main thread of the following survey.

But before proceeding to sketch the outlines of this history a few words must be said as to the events which were then taking place in Europe. How far those events may have directly influenced educational and other progress in the Netherlands must be left to more competent historians. At the least, they form the environment in which the educational legislation of the years 1801, 1803, 1806, and 1816,* was developed; and, as such, they demand notice.

When the Society for the Public Good began its educational work, Holland was still a Republic under its Stadtholder. In 1793 the National Council of France declared war against Holland; in 1794 the French armies overran Belgium, and in the following year entered Amsterdam, William V., the Stadtholder, with his family, escaping to England from Scheveningen in January, 1795. In 1798 the new Constitution of Holland was drawn up; for Bonaparte's treaty of the Campo Formio (October, 1797) had secured Belgium to France. Finally, in 1806, Louis Bonaparte was declared King, and Holland thus received its monarchical constitution.

Several of these events coincide with the milestones of educational progress, which have just been enumerated. The political changes of the day made for progress, at least in education. The conquest of Holland by France and the establishment of the Batavian Republic are closely followed by the suggestions for State education presented to the National Assembly in 1796. The agency of National Education was created by an Article in

* The date of the establishment of Normal Schools at Haarlem and Liere.

the new Constitution. The first law enacting State education was passed in the first year of the Batavian Republic, and the second great change in education (1806) coincides with the abolition of the Batavian Republic and the establishment of the monarchy under Louis Bonaparte.

Schools were made, by the law of 1806, "neutral" in the matter of religion.* Children of different denominations could attend them without having their religious convictions interfered with. But this neutrality, according to the Act, was to mean neither atheism nor indifference. "National education should be so organised that all pupils may be prepared at school for the practice of all virtues, both Christian and social."†

Priests and other ministers of religion were invited to undertake the religious instruction of the pupils out of school-hours. This invitation was issued in the form of a ministerial circular, and was on the whole well received and acted upon, notably by the Roman Catholics.‡

"The authors of the law," wrote Cuvier, "were on their guard against a desire to remodel everything anew; on the contrary they recognised all the existing schools, such as they then were, and by whatever means they were maintained; but they subjected all to one regular and uniform system of superintendence." This is well put in the article on the Netherlands in Buisson's Dictionary, "the law does not in any way take upon itself to 'create' a system of primary education; it does not impose upon the *communes* and the departments the obligation of erecting schools. The schools exist, they are there in sufficient numbers, the zeal of the Municipal authorities and of individuals are a far

* Surely M. Lacheret (*La question scolaire: Choses de Hollande*) mistakes the meaning of the term *neutral* when he says that, under the law of 1806, the school was not denominational, but, for all that, not neutral, because "*la Bible pouvait y être lue, on pouvait y prier. . . . C'est la Constitution de 1848 qui a proclamé le principe de la neutralité absolue.*" But only a prayer such as the Lord's Prayer, common to all Christians, could be used in school; only the Bible could be read. Nor has neutrality in Dutch schools ever been "absolute"; it has always been *neutrality relative to the religious opinions actually held by the pupils of any particular school*. M. Lacheret elsewhere (p. 69) makes some useful distinctions between "*la neutralité des programmes*" and "*la neutralité des maîtres*"; and again between "*la neutralité sympathique*," and "*la neutralité hostile*."

† "*. . . de façon que . . . les élèves soient préparés à l'exercice de toutes les vertus chrétiennes et sociales.*" The origin of this phrase may probably be traced to the memorial presented to the National Assembly in 1796. After excluding all admixture of a "dogmatic" system from the religion of the national schools the memorial continues "since every member of society . . . ought to know the duties of a good citizen, he also ought to be taught them. It is consequently desirable that a system of the rights, and especially of the duties, of a citizen should be inculcated upon the children."

‡ "*Il est des pays où l'école n'a pu être déclarée neutre qu'au prix de longues luttes et après une résistance obstinée du clergé. En Hollande, dans les premières années de ce siècle, l'état des esprits permit de réaliser ce progrès sans qu'aucune opposition se manifestât.*" Buisson. *Art. cit.*

surer guarantee of their existence and of their prosperity than any prescription of a few could be. The action of the Government in this state of things ought to be confined to superintendence and direction, and that is why the whole law is designed not to substitute for the initiative of the citizen the initiative of Government, but to establish a system of guarantees and of State control in order to prevent possible abuses."

The law of 1806 was passed by the National Assembly of the Batavian Republic and ratified in the same year by Louis Bonaparte on the establishment of the monarchy. It placed practically every school under the control of the Government. It is an example of that type of educational legislation which ignores all vested interests. "The system of education established by this law provided for scarcely any freedom of action whatever. It formally ordained the exclusive right of the State to erect schools and permitted the *communes* to erect them only under the direction, and subject to the control, of the Government. Educational freedom existed no longer."*

The fact that a school was in receipt of any grant, whether from the State, the province, the *commune*, or even a charitable or religious association, was enough to constitute it a "public school." Practically all existing schools were thus put within the meaning of the Act; and it further provided that no new school could be founded except with the authorisation of the Governmental, provincial, or communal authority.

The legislation of 1806 did not institute normal schools. It did, however, require of everyone intending to enter the teaching profession, a certificate giving a "general admission." This "general admission," gained by examination, merely conferred upon the successful candidate the title of teacher; he required a further "special admission" before he could actually teach. There were four grades of "general admission." To practise teaching as a public or as a private schoolmaster in towns it was necessary to hold the first or the second grade certificate. The third grade qualified teachers for village schools, and the fourth was for undermasters and assistants. Matthew Arnold speaks of "the Dutch regulation instructing the examiners to admit to the highest grade those candidates only who gave signs of a *distinguished culture*" as having "assigned to the schoolmaster's training a humanizing and educating direction." It is also worthy of notice that, by the eighth article of the Regulations on the Examinations, the commission was bound "to enter into a familiar conversation with the candidates, and to ascertain their moral and religious principles."†

The special admission meant success in a competitive examination of candidates for some definite vacancy as a public master. The law made the Inspector of the district necessarily

* "*Du régime légal de l'enseignement primaire en Hollande.*" M. Romain Moyersoen. Larose, Paris, 1895. See also Steyn Parvé, *op. cit.*, pp. 4-6.

† *Contemporary Review*, vol. vii., p. 394.

one of the examiners. A candidate for "special admission" as a private teacher needed no second examination; but he did require the authorisation of the *commune* in which he proposed to teach, and this was not usually given without the inspector's concurrence.

Normal Schools were not established until 1816, when, by M. Van der Ende's influence, one was placed at Haarlem for Holland, and another at Lierre, near Antwerp, for Belgium. But these institutions were sufficient only for a select number of the most promising teachers. For the ordinary teacher the training under the system known to us as that of "pupil-teachers" was all that could be obtained. It was the invention of the Society for the Public Good, who permitted the best scholars in their schools to stay without paying for two or three years longer than the others, on condition that they acted as teachers. They became in course of time, first, assistants; then, under-masters; then, head-masters. "It was the first serious attempt to form a body of regularly trained masters for primary schools. In our eyes it should have a special interest: we owe to it the institution of pupil-teachers."*

But to record the fact that England borrowed her pupil-teacher system from Holland would not in itself convey an accurate explanation of what that system actually was. With us, the system has never been so complete as it was in Dutch schools, and modifications have been from time to time introduced. It may be as well, therefore, to quote in full a description given by Sir James Kay-Shuttleworth in his "Second Report on the Training of Parochial Schoolmasters at Battersea,"† dated 1843.

"In Holland, the elementary schoolmasters in every great town form a society, associated for their common benefit. Their schools are always large, varying in numbers from three to seven hundred or even a thousand children, who are often assembled in one room.‡ Every master is aided by a certain number of assistants of different ages, and by pupil-teachers.

"The course through which a youth passes from a position of distinction, as one of the most successful scholars, to that of master of a school, is obvious. He is apprenticed as a pupil-teacher (an assistant, equivalent in the first stage to the most superior class of our monitors in England). As pupil-teacher he assists in the instruction of the youngest classes during the day, witnessing and taking part in the general movements of the school, and in the maintenance of discipline and order. He resides with his own family in the city, and before he is admitted apprentice care is taken to ascertain that he belongs to a well-conducted household, and that he will be reared by his parents in habits of religion and order. Every evening all the pupil-

* Matthew Arnold, *op. cit.*, p. 139.

† "Four Periods of Public Education," pp. 394, 395.

‡ The law of 1889 limited the number of pupils in any one school to 600.

teachers of the town are assembled to receive instruction. The society of teachers provides from its own body a succession of instructors, by one of whom, on each night of the week, the pupil-teachers are taught some branch of elementary knowledge necessary to school-keeping. One of the most experienced masters of the town, likewise, gives them lectures on method, and on the art of organising and conducting a school.

"The society of schoolmasters meets from time to time to receive from each of its members an account of the conduct, progress, and qualifications of each pupil-teacher in the town, not only in the evening classes, but in the school duties of the day.

"On the reputation thus acquired and preserved depends the progress of the pupil-teacher in the art of school-keeping. As his experience becomes more mature, and his knowledge increases, he is entrusted with more important matters and higher classes in the school. He undergoes two successive examinations by the Government Inspector, being first admitted candidate and afterwards assistant-master, and he is then at liberty to complete his course of training by entering the Normal School at Haarlem, from which he can obtain the highest certificates of fitness for the duties of his profession."

In another passage (p. 218) the same writer sums up the provision made for the training of teachers in Holland under the *régime* of 1806 to 1857 in the following sentences:—"Two normal schools now exist in Holland, in which a large body of teachers is trained; but it is a part of the discipline of the Dutch schools to select the most promising pupils, first as assistants in the more mechanical arrangements of the school, and then to be trained successively in every department, and at the same time to receive such instruction as may fit them, when they arrive at maturity, successfully to perform the duties of teachers in primary schools. Many of the pupils thus reared in the primary schools finish their education in the normal schools."

Sir James Kay-Shuttleworth's estimate of the value of this system may be gathered from his recommendation of it as "a course of training peculiarly well-adapted to the formation of masters for the great schools of large towns, and likewise for supplying these great schools during the education of the pupil-teacher with the indispensable aid of a body of assistant-masters.

Cousin remarks on the blunt directness of the new Dutch law. "It was not intended," he says, "to be a masterpiece of classification, in which the subject of primary instruction should be divided and classified according to all the rules of philosophical analysis. It went straight towards the goal which it was designed to attain by the shortest and safest road; and since in the last resort the whole success of a system of

primary instruction depends upon the inspection of schools, it was a system of inspection which the law constituted.*

But perhaps the best description of the law of 1806 as a whole is to be found in Matthew Arnold's report. His view of its principal characteristic and merit must be given in his own words.

"The law of 1806 was very short and very simple. It adopted the existing schools; but it did two things which no other school law had yet done, and which were the foundations of its eminent success—it established a thorough system of inspection for the schools, a thorough system of examination for the teachers.

"To organise inspection. This is, in fact, the grand object of the law of 1806; with this it begins and with this it ends. To keep the system of inspection efficient was the central thought, the paramount aim of its author,† up to the very last days of his life, when, a venerable old man, he received M. Cousin at Haarlem in 1836, and said to him, 'Take care how you choose your inspectors; they are men whom you ought to look for with a lantern in your hand.' And inspection in Holland was organised with a force and completeness which it has attained nowhere else."‡ This is the more remarkable in that some of the best work done by the inspectors was unpaid, "following a practice not rare in Holland, where the public service is esteemed highly honourable, and where the number of persons able and willing to take part in it is greater than in any other country."

Arnold shows that the whole system established in 1806 depended upon the inspectors, for, while the provincial and communal administrations were charged to provide proper means of instruction, to ensure the teacher a comfortable subsistence and to obtain a regular attendance of the children, "there were no provisions exacting from the *communes* an obligatory establishment of schools, a legal *minimum* of salary for teachers; none exacting from the children a compulsory school attendance. Neither did the State enter into any positive undertaking as to its own grants. In general terms it reserved to itself the right to take such measures as it should think fit to improve the teacher's position, and to promote the good instruction of the young. It left the rest to the stimulating action of its inspectors upon provincial and communal administrations singularly well disposed to receive it. . . . Its confidence was justified."§

* "*Quoi de plus choquant pour nos habitudes . . . la loi Hollandaise n'a pas voulu faire un chef d'œuvre de classification . . . elle a été droit au but qu'elle se proposait d'atteindre . . . et, puisque, au fond, tout repose sur l'inspection, c'est l'inspection que la loi a constituée.*"

† M. Van der Ende, called "the father of public instruction in Holland."

‡ Commission of 1861, vol. iv., p. 136. The system was further improved first in 1857 and again in 1878, *see below*.

§ *Ibid.* p. 137.

Every province was divided into a certain number of districts and each district was controlled by an inspector. Three times a year the inspectors met to form the Provincial Commission for primary education. Among the principal tasks of these Commissioners were the issue of certificates of qualification to teachers and the examination of the reports on the condition of schools in their province. Once a year each Provincial Commission sent a delegate to the Hague; and these delegates discussed the improvements to be introduced into the system. Thus, everything depended upon the Inspectorate.

The best description of the system of inspection thus established is given by Sir James Kay-Shuttleworth in his "Four Periods of Education."*

"The superintendence of education was thrown upon the Minister of the Interior, assisted by the Inspector-General of Instruction. From this department a series of well-devised regulations have in successive years emanated, which have been gradually carried into execution by a system of inspection so devised as to be in perfect harmony with the municipal institutions of the country and the character and feelings of the inhabitants. The inspectors form the medium of communication between the Government, the municipal councils, the provincial authorities, and the committees and directors of schools. It is their duty to foster the exertions of the local communities and to direct them to useful objects. . . . Every inspector visits the schools of his district at least twice every year; he has power to appoint local school commissions, but is himself under the authority of a commission of inspectors of each department, which assembles three times a year in the chief town of the province to examine the reports of the local inspectors and to discuss and settle all matters relating to the internal regulation of schools. Deputies from each departmental commission are sent to the council of inspectors at the Hague, which assembles annually to confer with the Inspector-General and the Minister of the Interior."

Mr. Hickson, in an "Account of the Dutch and German Schools," published in 1840, expressed his opinion that "the Dutch schoolmasters are decidedly superior to the Prussian, and the schools of primary instruction consequently in a more efficient state. This superiority we attribute entirely to a better system of inspection. . . . In Holland, inspection is the basis upon which the whole fabric of public instruction rests."

In 1810 Holland was taken from Louis Bonaparte and annexed to the French Empire. Cuvier's report had more than a merely literary and academic influence; and the educational system of 1806 seems to have been but little affected by this and the other changes that followed.† In 1813 the Kingdom of the Nether-

* pp. 217 and 218.

† "A la suite du rapport de Cuvier, un décret impérial du 22 Oct. 1811, décida que la législation du 3 Avr. 1806 . . . serait maintenue."—Buisson, For the text of this Imperial Decree see Steyn Parvé, p. 3.

lands was formed for the House of Orange by the union of Holland and Belgium. But the "fundamental law" (1815) of the new political *régime* merely reaffirmed the principle of State control of primary education first announced in 1806.

The law of 1806 was well received for about ten years. The political movements of 1795, had inaugurated an equality of rights for the small Roman Catholic population, and this minority could not protect itself more effectually than by sustaining a law which took from the public schools their original Protestant character, and banished from them the catechism and all sectarian instruction. But it was inevitable that discontent should be caused when the Government began so to use the provision that no school could be founded without express authorisation as to prevent or hinder the foundation of private denominational schools. Permission to found private schools was in practice restricted to deacons, orphanages, and to the Society for the Public Good, which "acted as a sort of agent of the Government for bringing the existing private schools into harmony with the law, and for organizing new ones in its spirit." It made the discontent more acute that (according to M. Moyersoen) the prohibition of dogmatic instruction in the public schools was not always respected, in spite of the protests of the Catholic population. Indeed, the grievance against the system was felt mainly by the Roman Catholics, because, as Matthew Arnold points out (p. 143), "the word '*Christian*' in the law of 1806 had become in practice merely another word for '*Protestant*.'" A Bill to allow private persons to open schools, provided the communal authority did not oppose their foundation on the ground that there were already several schools in the *commune*, was thrown out by the States-General in 1830. Cousin says, "when the Government in 1829, in its partiality to the Liberals of Belgium, proposed a new law making deplorable changes in the law of 1806, the Chambers united in opposition to it, and the Government was obliged to withdraw its proposal."

A description of the connection between the religious and educational institutions in Holland about 1830 to 1840, written by Mr. Nicholls, who had visited the country, may here be quoted from Sir James Kay-Shuttleworth's "Four Periods of Public Education" (p. 218).

"As respects religion," wrote Mr. Nicholls, "the population of Holland is divided in about equal proportions into Catholic, Lutheran, and Protestants of the Reformed Calvinistic Church, and the ministers of each are supported by the State. The schools contain, without distinction, the children of every sect of Christians. The religious and moral instruction afforded to the children is taken from the pages of Holy Writ, and the whole course of education is mingled with a frequent reference to the great general evidences of revelation. Biblical history is taught, not as a dry narrative of facts, but as a storehouse of truths, calculated to influence the affections, to correct and elevate the

manners, and to inspire sentiments of devotion and virtue. The great principles and truths of Christianity, in which all are agreed, are likewise carefully inculcated, but those points which are the subjects of difference and religious controversy form no part of the instructions of the schools. This department of religious teaching is confided to the ministers of each persuasion, who discharge this portion of their duties out of the school; but within the schools the common ground of instruction is faithfully preserved,* and they are consequently altogether free from the spirit of jealousy and proselytism."

As against this somewhat optimistic view of the undenominational teaching in Dutch schools, it may be permitted us to quote a generalisation drawn by Matthew Arnold from his study of education in Holland:—"No religion has ever yet been impressively and effectively conveyed to ordinary minds, except under conditions of a dogmatic form and positive formularies."

At this point it may be advisable once more to take a rapid glance at contemporary political events in Europe in order to place the educational history of Holland in its proper setting. The French Revolution of July, 1830, profoundly affected Europe. To its influence may naturally be traced the rising in Poland, the movements in Italy and Switzerland, the Reform Bill of 1832, and, first, but not least, the Independence of Belgium.

Louis Bonaparte had abdicated in July, 1810, because he felt that he must act contrary either to the designs of his brother the Emperor or to the true interests of the people over whom he had been set to rule.† The treaty of Vienna had united Holland and Belgium into a single kingdom, under William I., formerly Stadtholder of Holland. The union had been effected for reasons merely political. The differences which had divided the Netherlands into two halves in the sixteenth century had not been removed. The Dutch were mainly Calvinists and the Belgians Roman Catholic; each nation was alike devoted to its religious faith. Nor was the difference only one of religion; the Dutch were a trading, the Belgians a manufacturing people; the northern provinces of the Netherlands were Teutonic by sympathy and to a great extent by inherited character; the southern provinces were alike in culture and in language inclined to the Latin type. But even from these differences a unity might have been evolved but for the policy of William I., which tended to intensify them. The Belgians, though they were numerically superior, had no more representatives than the Dutch, and the Constitution (carrying with it part of the national debt of the northern provinces) had been forced upon them against their will.

But it was probably a radical difference on the religious

* This judgment differs from that expressed by M. Moyersoen, *op. cit.*, 5.

† *"Le roi Louis abdiqua en 1810, ne voulant pas accepter le rôle d'instrument docile des volontés de l'Empereur son frère qu'il jugeait contraires aux intérêts du peuple Hollandais."*—Buisson.

question as it presented itself in education that finally brought the feeling of Belgium to that inflammatory state which needed only the example set by France in July, 1830, to produce a conflagration. The Belgian clergy were alienated from the Dutch union by the neutrality of public education, not so much because of the secular character thus given to it as because its neutrality implied the placing of Roman Catholics and Calvinists upon an equal footing. "The law of 1806 was a perfect abomination in the eyes of the Belgian clergy. The King tried as much as was in his power to take away the most offensive features of it. At length, in 1829, he went even so far as to offer a new School Law to Parliament. . . . Next year, 1830, the King issued a decree by which considerable alterations were introduced into the law of 1806. But it came too late to appease the resentment of his Belgian subjects.*" A close, if unnatural, alliance was formed between the clerical and Liberal parties in Belgium, the clerical party being mainly actuated by its discontent with the existing state of education in the union.

Such was the state of feeling in Belgium when the news of the revolution in Paris arrived. On August 25 there was a rising in Brussels. William I. practically gave way since his son William, Prince of Orange, actually proposed the legislative and administrative independence of Belgium under the Dutch crown. The States-General were summoned in September; and the scheme for a separate legislature would no doubt have been passed (the Dutch being nearly as eager for it as the Belgians) but for the obstinacy of the King. The revolution broke out this time in good earnest. The independence of Belgium was proclaimed by the provisional Government. It further declared that the House of Orange had forfeited all claims upon Holland. It would probably have established a Republic but for the clerical party of the Revolution.

How far the educational grievance of Belgium helped to bring about the final rupture with Holland may be gathered from some words of Sir James Kay-Shuttleworth's, a witness almost contemporary.† While admitting that the Dutch Government had committed some great legislative and administrative errors, Sir James believed that "the sense of these injuries was inflamed and rendered intolerable by the industry with which the Roman Catholic clergy availed themselves of every means to irritate the public mind against the combined system of education. The impolicy of the Government of the Netherlands in other particulars might have failed to produce the Revolution of 1830, if the clergy of the Roman Catholic faith had not determined to resist a system of education, however efficient, which reduced the majority to the same level of civil rights with the minority of the religious communions, and which, for this purpose, excluded from the combined schools

* *Contemporary Review*, vol. vii., p. 399.

† "Four Periods of Public Education," p. 450.

instruction in the peculiar doctrines of the Roman Catholic faith, reserving them as the separate duties of the clergy." On the whole, however, it is unfair to speak of the opposition to the neutral school as coming, even at this period, solely or even mainly from the Roman Catholics.

Leopold I., widower of Princess Charlotte, became King of Belgium in 1831, and the London Conference drew up the Constitution. But in August Leopold found that his new kingdom was invaded by the Dutch; he was himself defeated on the 11th; and, as a result, more favourable terms were now given to Holland in the separation effected by the London Conference in November. The Dutch had only been checked by a French Army under Marshal Gérard and the appearance of an English fleet in the Scheldt. Even in 1832 William had to be forced before he would accept the articles of the convention agreed upon in the London Conference. An English fleet blockaded the coast of Holland, and Antwerp was besieged by the French. A preliminary treaty in May, 1833, put an end to hostilities; but it was not until 1839 that William definitely consented to accept the situation created by the interference of the Powers.

Sir James Kay-Shuttleworth wrote, about the year 1840, "Holland is now one of the best instructed countries in Europe; and the singular prudence, industry, moral habits, and religious feeling of the Dutch people are chiefly attributable to a system of education interwoven with the institutions, and with the habits and feelings of the nation."*

In the meanwhile a constitutional Government had been established in Belgium, and the country made rapid progress. Among other causes of this progress may probably be reckoned the freedom of education decreed by its new Constitution. The authority of Sir James Kay-Shuttleworth in matters connected with education is a very high one, but it is difficult to acquit him of exaggeration in regard to the effect upon Belgium of the declaration making education "free" which was contained in her Constitution of 1830. He says "The entire proceedings of the Dutch Government . . . are descriptive of the benefits derivable from a judicious and persevering application of the powers of the Executive to the improvement and extension of primary instruction, while the consequences of the law proclaiming the liberty of teaching, or in other words, abandoning primary education to the spontaneous agencies of society, are to be found in the almost complete ruin of all institutions for the primary education of the people in Belgium." When he wrote this, however, Sir James held a brief for the "State control" of primary education; and something may therefore be deducted from this sweeping judgment of "free" education in Belgium after her separation from Holland in 1830. Still, it is probable that Belgium suffered from the defect of all

* "Four Periods of Public Education," p. 218.

reactions, and went too far in removing the supervision of the State from her elementary schools. The same writer in another passage (p. 450) speaks of the "immediate secular consequences of this outcry from the Roman Catholic clergy in Belgium" as having been "most disastrous. . . . From the Revolution until a very recent period, elementary education in Belgium has been in ruin, presenting an ominous contrast between the results of the power of the State directed with skill to the establishment of an efficient system of instruction, and the impotence of that *freedom of education* which (evoked to satisfy the claims of religious zeal, and to aid a patriotic resistance to the errors of a foreign government) produced in the schools nothing but failure and confusion."

Belgium was not without its influence on Dutch education. In particular, first her influence and then her example probably helped to bring about the Royal decrees of 1830 and of 1842. From this point, however, the history of Dutch education must be treated separately.

The Royal decree of 1830, which as we have seen was a tardy attempt to allay the discontent of the Belgians, allowed more liberty for establishing private schools by transferring the power to grant licences for that purpose from the Ministry of the Interior to the local magistrates. The intention of the decree was doubtless sincere enough, but its practical result was to shorten the process by which a refusal of such licences could be obtained. The Governors of the Provinces were empowered to dispense with the competitive examinations of candidates for appointment as teachers, thus making it easier for the religious faith of candidates to be taken into consideration. Lastly, the use of books containing anything offensive to any denomination was prohibited.

The decree of 1842 attempted to allay the discontent in Holland by providing that religious interests should be represented on the Provincial Commissions, and that, in districts where it could be shown that the majority of the residents belonged to a particular religious communion, the religious faith of the candidates for the position of teacher in the school should be taken into account when an appointment was made. Theoretically, of course, the agreement in religious faith between the teacher and the majority in the *commune* would only be an additional point in his favour. It would influence their decision, *ceteris paribus*; that is to say, when the educational qualifications of the candidates were equal. In practice, no doubt, it became, in districts where one religious communion was in predominance, a *sine quâ non* that the teacher should also belong to it.

The decree of 1842 further allowed the clergy of the various communions a right of censorship on the school-books, which they could exercise through their representatives on the Provincial Commissions. More important still was the recommendation

made to all communal authorities to place their school-rooms at the disposal of the clergy for religious instruction out of school-hours.

The decree was backed by a circular from the Minister of the Interior in which it was urged that "popular instruction should remain a merely civil, social concern, and was not to be influenced by the doctrinal opinions of any denomination."

In spite of this and other attempts at conciliating the religious interests, the cry for some change became more and more insistent. The revised constitution of 1848 declared education to be free, although under supervision—"libre, sauf la surveillance de l'autorité"—and suggested that the time was now ripe for the amendment of the laws dealing with primary education.

During the next seven years one or two attempts were made to introduce educational legislation, but successive ministries were turned out before their proposals had even been discussed in the Chambers.

"In 1848," says Matthew Arnold, "Holland had the disease from which it seems that, since the French Revolution, no constitutional State on the Continent can escape; it wrote down its Constitution. The Constitution of 1848 proclaimed liberty of instruction. . . . It was necessary to bring school legislation on this point into harmony with the new Constitution."*

The significance of a constitutional declaration of this nature is not easy to understand at first sight. But it should be remembered that it always defined the sphere to which future efforts at legislation must be restricted.† Legislative changes were attempted almost immediately, and a bill was presented in 1849 with the object of bringing the school law into line with the Constitution proclaimed in 1848.

Among the abortive attempts at amendment of the school legislation made between 1849 and 1855 the most remarkable was the bill presented in 1854 by M. Van Reenen. It dealt with secondary as well as primary education; and this combination in one law raised so lively a resistance that the measure had to be withdrawn.

In 1855 a bill, reproducing the provisions of the law of 1806 in regard to religious instruction almost in the same terms, was presented by M. Van Hall, a conservative. The preceding cabinet had been turned out in 1854 by a coalition between the conservatives and the "anti-revolutionary" party; but the coalition was dissolved in consequence of this new Educa-

* Cf. Buisson; "*L'application des principes de la constitution de 1848 exigeait le remplacement de la loi de 1806 par une loi semblable.*" Lacheret p. 60; "*neuf ans s'écoulèrent avant qu'une loi pût faire passer ce principe de la théorie dans la pratique.*"

† Even the suggested revision of the "declaration" in 1885, though it was superseded in the Constitution of 1887, had its influence on the legislation of 1889 (*see below*).

tion Bill M. Groen van Prinsterer* led the opposition of the 'anti-revolutionary' party, and succeeded in rousing the opinion of the public to such a pitch that the Government felt constrained to resign.† In reality there was considerable discontent in the country not only in regard to the unsatisfactory position of the *école confessionnelle*, which the bill of 1855 would have made as bad as it had ever been in times past, but also with the neutrality of the public schools in matters of religion, which the bill would have left untouched.

Professor Lecky says that "the 'anti-revolutionary party,' which has played an important part in modern Dutch politics, was chiefly formed to abolish the system of neutral education."‡ In the new cabinet were some members of this party; but they failed in their educational programme. For in its final form the Act of 1857 differed but little from the Bill of 1855. One concession to the claims of religious bodies was common to both measures. It was provided that members of religious communities should be allowed to use the school buildings for the religious instruction of the pupils attending that particular school except during the regular school hours. This arrangement had first been recommended in the Decree of 1842, but was now made obligatory upon those who received a request that they should give this opportunity for religious teaching. Religious instruction, both in the rejected proposal of 1855 and in the law of 1857, was entrusted to the religious bodies in terms which once more affirm by implication the neutrality of public schools.§

The failure of the educational campaign of 1855 may fairly be ascribed to the *intransigence* of the party that organised it. For one article of the original measure proposed by the Minister of the Interior in 1857 embodied a substantial concession to the claims of the denominational schools; and yet the large majority by which it was thrown out included the party which the article was designed to conciliate. With the exception of this article, the proposal became law in spite of the anti-revolutionary opposition.

But the rejected article (21) deserves further notice. It consisted of a provision empowering the Government to subsidise

* Lacheret p. 63. . . . "le fondateur du parti chrétien historique, qui s'appelle aujourd'hui le parti antirévolutionnaire."

† "M. Groen van Prinsterer avait réussi. . . à provoquer dans le pays une telle agitation que le ministère crut devoir offrir sa démission." (Moyersoen.) "Les ministres furent obligés de donner leur démission, après une pétition du pays entier, tendant à prier le roi de retirer ce projet de loi." (de Loos.)

‡ "Democracy and Liberty," vol. ii., p. 59.

§ L'instruction religieuse est abandonnée aux communautés religieuses. Les locaux sont mis à leur disposition à cette fin en dehors des heures scolaires régulières et seulement pour les élèves qui fréquentent l'école (1857). The wording of the corresponding passage in the Bill of 1855 was almost identical.

¶ Nul ne combattait cette proposition avec plus d'énergie que le parti antirévolutionnaire. . . . On verra quelle revanche l'avenir lui réservait Lacheret, *op. cit.*, p. 65.

a "free school," when the religious scruples of parents interfered with the attendance of their children at the public school. No subsidy could, however, be granted on these grounds, unless it appeared, after careful examination, that the grievance of the parents could be removed by the foundation of such a "free" school; and even then a special law would be required to sanction the subsidy. In spite, however, of these restrictions, the clause would have been greatly to the advantage of the denominational schools, at least as a concession of principle and an instalment of its practical application.

The rejection of this clause did not, however, affect the right to subsidise private schools given by another article to the *communes*; but in this right was involved no concession of principle, since a private school in receipt of such a subsidy became *ipso facto* "neutral" in the matter of religion.

The debates upon the law of 1857 were of extreme interest. Those who wish to follow the current of opinion in Holland upon this question of denominational schools may read the lucid and detailed account given by de Laveleye in his "*Débats sur l'Enseignement Primaire dans les Chambres Hollandaises, 1857.*" It is only necessary here to choose a few salient points for remark, and to quote in full the general conclusion which Matthew Arnold drew from his study of de Laveleye's work.

In the first place, then, it should be noted that the ministerial circular (issued soon after the law of 1806) inviting the religious bodies to undertake the religious instruction of public school pupils had been well received by the Roman Catholics. Their attitude towards the neutral public school had been throughout widely different from the standpoint of the Calvinist and orthodox Protestant bodies. It would be a mistake to suppose that all the religious bodies who combined to press for better conditions for denominational schools were at one in detesting the "neutrality" of the public schools. In the second place, it must be remembered that the Roman Catholics had all along used their influence to banish every vestige of religion from the schools, and to impose the most rigorous observance of those clauses in the law of 1806 which forbade the teacher to inculcate any religious ideas that belonged definitely to any one sect more than another. Thus in the thirties Dr. Groen van Prinsterer had maintained that not only the Separatists, but the Reformed Church itself, were compelled to sacrifice their rights for the benefit of the Roman Catholics. And, in the same sense, de Laveleye explains that it was the policy of the Roman Catholics which drove the extreme Protestants to their strong attack upon the neutral public school as an "atheistic school" and a "home of irreligion and immorality."* And thirdly, it

* "*Une école athée*"—"un foyer d'irreligion et d'immoralité." See especially de Laveleye (*Débats*, etc.) p. 9; Lacheret (*Choses de Hollande*) p. 64; and compare the pronouncement of the more modern Socialists (*La Société Nouvelle*, February, 1894, p. 142), "*l'école neutre est une école sans vie, sans âme; c'est une école automate.*"

may be as well to give de Laveleye's analysis of the wishes of the three parties he distinguishes. The first party wanted denominational schools, positive and dogmatic Christianity as the basis of primary education, and the insertion of the word "Christian" in the law.* The second was willing to accept the neutral school, desired the retention of the word "Christian," but understood by it only the most general truths of the Christian religion, together with Christian morality. The third party—and this was in agreement with the cabinet—would admit only Christian *morality* in the public schools, and would alter the formula of the law about the moral function of the neutral school, substituting some general words about the "development of moral and religious feelings."†

Keeping these few points in mind, readers will be the better able to appreciate Matthew Arnold's summary of the debates.

"Against the neutral school the high Protestant party stood alone; but its strength, though unaided, was great. This party is at the same time the great conservative party of Holland, it was strong by its wealth, by its respectability, by its long preponderance, by the avowed favour of the King. It was strongest of all, perhaps, by the character of its leader, M. Groen van Prinsterer, a man of deep religious convictions, of fervent eloquence, and of pure and noble character.‡ . . . If the opponents of the non-denominational school were one, its supporters were many. First of all stood the Roman Catholics, insisting, as in States where they are not in power they always insist, that the State which cannot be of their own religion shall be of no religion at all, that it shall be perfectly neutral between the various sects, that no other sect, at any rate, shall have the benefit of that State connection which here it cannot itself obtain, but which, when it can obtain it, it has never refused. Next came the Jews and dissenters, accustomed to use the public schools, desiring to make them even more neutral rather than less neutral, apprehensive that of public schools allotted separately to denominations their own share might be small. Next came an important section of the Protestant party, the Protestants of the New School as they are called, . . . whose stronghold is in the University of Groningen, who take their theology from the German rationalists, and, while they declare themselves sincerely Christian, incline, in their own words, 'to consider Christianity rather by its moral side and its civilising effect than by its dogmatic side and its regenerating effect.'§ For these persons

* *I.e.* the retention of the words "*toutes les vertus Chrétiennes et sociales.*"

† "*développement du sentiment moral et religieux.*"

‡ Cf. E. Lacheret (*Choses de Hollande*), p. 63: "*un homme supérieur, dont le caractère comme le talent imposaient le respect à tous, un chef qui à lui seul valait une armée.*"

§ Cp. de Laveleye, *op. cit.*, pp. 11, 12, "*Cette tendance, tantôt unitairien, ne tantôt rationaliste, conduit à considérer plutôt le côté moral et l'effet civilisateur, que le côté dogmatique et l'effet régénérateur du christianisme.*"

the general character of the religious teaching of the Dutch schools under the law of 1806, the "Christianity common to all sects" taught in them, was precisely what they desired. Finally, the neutral schools were upheld by the whole liberal party, bent in Holland, as elsewhere, to apply on every possible occasion their favourite principle of the radical separation of Church and State, bent to exclude religion altogether from schools which belong to the State, because with religion, they said, the State ought to have no concern whatever.*

"The party which really triumphed was that of the Protestants of the New School. They owed this triumph less to their own numbers and ability than to the conformity of their views with the language of the legislation of 1806. That legislation was dear, and justly dear, to the people of Holland; a school system had grown up under it of which they might well be proud; they had not generally experienced any serious inconvenience from it. . . . The new law, therefore, . . . still used, like the old law, the word *Christian*. It still declared that the object of primary education was to "develop the reason of the young, and to train them to the exercise of all *Christian* and social virtues. . . . Popular instruction in Holland is therefore still (1861) *Christian*. But it is *Christian* in a sense so large, so wide, from which everything distinctive and dogmatic is so rigorously excluded, that it might as well, perhaps, have rested satisfied with calling itself *moral*. . . . The Jews might be satisfied, but the orthodox Protestants were not. . . . M. Groen van Prinsterer made a final effort against the new law. 'If this law passes,' he cried, 'Christianity itself is henceforth only a sect. . . . we shall have not only the *ne plus ultra* of the separation of Church and State, but we shall have the separation of State and religion. . . . If the Constitution makes the irreligious school a necessity, revise the Constitution.' When the law passed he resigned his seat in the Chamber, and retired into private life."†

But it is now time to deal with the law itself. It has already been said that it conferred upon the *communes* the right to subsidise private denominational schools, but that the receipt of such a subsidy by a school involved the severance of its connexion with any denomination and the adoption of the religious "neutrality" of the public school. The provision placing the school-rooms at the disposal of the clergy of the various com-

* Cf. the words of M. van der Brugghen, a disciple of Vinet, quoted by M. Lacheret (*Choses de Hollande*), p. 62: "*La cause du christianisme n'est pas une affaire d'Etat. Il en résulte que . . . là où l'Etat doit donner l'instruction, celle-ci ne peut avoir pour but l'avancement de la vérité chrétienne, parce que cette œuvre est complètement en dehors du droit, du pouvoir, et de la mission de l'Etat.*"

† Matthew Arnold, *op. cit.*, pp. 145, 146. For the voting see Steyn Parvé, *op. cit.*, p. 23.

munities for the religious instruction of the pupils outside the regular school hours has also been noticed.

By the law of 1857 wide powers were given to the communal authorities. It became their function to determine the number of schools in their district, to decide whether subsidies should be granted to private schools, to nominate teachers, and to suspend or revoke their appointment. But these powers carried with them a large increase in the communal expenditure. Practically, it became the duty of the *commune* to defray the expenses of primary education; for, though the State and the Provinces were empowered to subsidise those *communes* whose expenditure on education was necessarily beyond their resources, they were not obliged to do so on principle. In such cases the Government and the Province each contributed an equal share. But the provision was rarely used. In 1876 only 7 per cent. of the total expenditure on education was met in this way.

To lighten the burden thus imposed upon them the communal authorities were permitted to exact school fees. But they were also empowered to give exemption to the poor who were "on the rates," and even to those who were unable to pay school fees, although they received no poor law aid.*

Certain changes were also made in the system of inspection. Three grades of inspectors were provided for, viz.: (a) the local commissions appointed by communal councils; (b) honorary district inspectors whose expenses were paid (*indemnité de déplacement*); and (c) the provincial inspectors who were paid as regular Government officials. Both the district and the provincial inspectors were appointed by the King, and the country was divided into ninety-five districts for inspection. Matthew Arnold writes, "between the provincial inspectors and the Minister, the law of 1857 has omitted to place inspectors-general. M. de Laveleye, in general the warm admirer of the Dutch school-inspection, considers this omission most unfortunate." The new law also provided for pensions for teachers in public schools, one-third of which was to be borne by the *communes*, and the remainder by the Government. Lastly, in *communes* with a population of more than 3,000, a special school committee was to be appointed by the communal council.

The Act of 1857 appears to have satisfied the Catholic more than the Protestant interest.† This was not only because of the attitude of the Catholics towards the "neutral" school which

* Art. 33. ". . . les pauvres assistés et ceux qui, bien que non assistés, sont impuissants à payer la rétribution scolaire, en sont dispensés."—M. Moyersoen speaks of "*L'abus que faisaient certaines communes de leur droit de rendre l'école officielle gratuite, même pour les enfants non indigents.*"

† On dénonça l'école publique, cette école sans prière, sans Bible, sans foi, comme un fléau; on travailla à la rendre toujours moins chrétienne, en détournant les jeunes instituteurs pieux d'entrer au service de l'État; les pasteurs orthodoxes se firent une sorte de scrupule d'en franchir les seuils.—*Choses de Hollande*, p. 56; see p. 65 for an excellent sketch of the alternative policy that the denominational party might have adopted,

has already been described,* but also because in the Catholic provinces of the South the public school was often, in reality, denominational, owing to the practice in regard to the appointment of teachers instituted by the decree of 1842. On the other hand, the orthodox Protestants, together with the Catholics of the Northern provinces, had, from the first, grave objections to the new law. Their principal complaint was that it made it impossible for the denominational school to compete with the public school. Apart from the grievance that they were still compelled by the new law to support schools not attended by their children there was real ground for discontent with its administration by some of the *communes*, who interpreted their power to exempt from school fees somewhat too liberally. The subscribers to denominational schools had frequently to contribute also to public schools in which instruction was given gratuitously to all children, irrespective of their ability to pay fees, and in despite of the restrictions imposed by law.

Thus it was that gratuitous instruction became the bugbear of the supporters of denominational schools. The grievance—and it was real, for the law was frequently infringed—was of course stated in terms of finance. A school in which the instruction was free cost the *commune* so much more than a school in which fees were exacted. It was held that local rates for education were already high enough, and that it was monstrous to raise them still higher by dispensing with fees when parents were perfectly able to pay them. The real fact was that it mattered very little to the parents of public school children whether they paid their contribution in the form of fees or in the form of an increased rate. It mattered very much to the parents of denominational school children, who already paid highly enough for a commodity which they could not, or would not, use.

In 1865 there were 263 *communes* in which no school fees were charged. This feature of the law of 1857 was reproduced in the law of 1878, and the abuse of the power to grant exemption from school fees, persisted also, especially it seems, in Friesland.†

When the Act of 1857 came into force 2,516 out of a total of 3,473 schools were “public”; and of the 957 “private” schools 25 only were aided by the *communes*. During the first two years Biblical history was taught in most schools, because, though it was not made compulsory, it was not forbidden by the new law, but in 1861 the Jews at the Hague, demanded that it should be struck off from the list of subjects that might be taught, and of course their desire was complied with. The teachers began to teach Biblical history on Saturdays only. One inspector.

* The French Ultramontane newspaper, *L'Univers*, declared about 1857 that “scepticism in Holland, modified by the national character, has much ‘sweetness’ indeed, because it may be made subservient to the destruction of Protestant institutions.”—See *Contemporary Review*, vol. viii., p. 110.

† “*Les abus furent nombreux (i.e. after 1878). En Frise, dès que dans une commune s'établissait une école privée l'administration communale s'empresait de rendre l'enseignement public gratuit.*”—Moyersoen, p. 13.

Professor de Groot, urged the teachers in his district to teach Biblical history. But the Chief Rabbi of Drenthe sent in a protest to the Government, and this inspector of twenty-eight years' standing was compelled to resign. The Roman Catholics found the Jews welcome allies against Protestantism in the public schools.

An attempt was made in 1867 to better the position of the "private" schools. M. de Brauw, a member of the ultra-Protestant party, introduced a measure empowering the *communes* to make grants-in-aid to denominational "private" schools, under certain restrictions to prevent abuse, but forbidding them to provide free instruction unless all the expenses of primary instruction could be met without any demand on communal funds, while allowing them to close the public school if it were only attended by a small number of pupils, in consequence of the establishment of "private" schools. A dissolution of the Chamber prevented any discussion of the measure. In the following spring Heemskerk proposed to adopt M. de Brauw's proposals as to the limitation of free primary instruction at the expense of the *commune*.

But none of these proposals survived the political changes of the time. They are interesting because they show that sooner or later (and it was not until 1889) the question of denominational schools would have to be settled.

Yet another proposal, more original and sweeping, but with the same tendency, was made by the Calvinist party. The State, it was proposed, should indemnify those who supported a denominational school in proportion to the number of pupils attending it, and on the scale of the average expenses per scholar of public instruction in the same *commune*.^{*} Needless to say, this proposal shared the fate of others, less ingenious, directed towards the same end. The Calvinist proposal of M. Kuyper was followed by the Conservative proposal of M. Heemskerk. He was at the head of the Conservative Cabinet from 1874 to 1877. His celebrated proposal was rather insidious, for it began by abolishing all grants to denominational schools even under the prohibitive restriction, which made a private school in receipt of aid *ipso facto* a public, *i.e.*, a neutral, school. So far it was a concession to the Liberal platform; and it emphatically rejected the *système de restitution* proposed by Kuyper. On the other hand, it was in reality designed to restrict the power of the *communes* to give a free education. They were, according to the proposal, to exact school fees, unless it could be shown that all the expenses of communal administration could be covered without raising a local communal rate of any kind whatsoever.

^{*} Buisson writes of this, the Kuyper proposal, "*c'était une manière détournée de faire allouer aux écoles privées une subvention officielle, tout en éludant les prescriptions de l'article 3 de la loi, qui exigeait des écoles prétendant à une subvention de ce genre qu'elles renoncassent à leur caractère confessionnel.*" M. Kuyper (Prime Minister and Minister of the Interior in the Government formed in July, 1901) was a pastor in the Dutch Reformed Church, a professor in the Calvinist University at Amsterdam, and the editor of the "Standaard," then the organ of the anti-revolutionary party.

The Liberal party, who did not at all wish to restrict gratuitous education to those families who were unable to pay fees, resisted Heemskerk's proposal with all their force. The elections increased their numbers, and on November 4th, 1877, a new Liberal Cabinet was actually formed under M. Van de Coppello.

At this point we are able to quote contemporary evidence as to the extent of the dissatisfaction caused by the school system of the law of 1857. M. de Laveleye, writing in 1872, noted that all progress in school attendance was suspended:—*"Le côté le plus fâcheux de la situation de l'enseignement, c'est que le progrès de la fréquentation des écoles est suspendu. De divers côtés même il y a diminution, fait grave, car partout dans les autres pays, on avance."**

It is obvious that the low average of attendance at that time was largely due to the antipathy felt by a great part of the Catholic and Protestant population towards the "neutral" character of State education. De Laveleye, however, does not say so; though he is careful to remark that the organisation of schools had become a *party question*, and that all good citizens should unite in developing primary education.† That this was the real reason of the irregular attendance which de Laveleye deplored in 1872 is well borne out by the remarks made to Matthew Arnold by M. van Hooijtema in 1861. He told him that "in the large towns, at any rate, there was an increasing dissatisfaction with the inadequate religious instruction of the public schools, an increasing demand for schools where a real definite religious instruction was given." He added that this was "a grave state of things"; and that "Government would probably be driven to do something in order to try to remove the present objections" to the public schools. Matthew Arnold did not regard this testimony as decisively establishing the failure of the then recent school law of 1857. "But it is evident," he says, "that the example of Holland cannot at this moment be appealed to as exhibiting the complete success of the non-denominational principle."‡ This was written ten years before M. de Laveleye's book: what was true in 1861 had become a truism by 1871.

M. de Laveleye's estimate of the law of 1857 was a high one. He considered it to be in certain aspects one of the best educational laws then existing. If it did not produce the remarkable results obtained in Denmark and in Germany, it was because it enacted neither compulsory attendance nor gratuitous instruction. Without these two measures it was impossible, he thought, to get all the children to come to school, however excellent might be the education offered to them. But in the light of subsequent events we may well question whether it would have made for progress to enact gratuitous education at that period; and as for the

* p. 262. "L'Instruction du Peuple." Émile de Laveleye. Paris: Hachette. 1872.

† *Ibid.* p. 257.

‡ Cf. Lacheret, p. 68: "*l'école neutre, qui devait être l'école de tous n'était plus que l'école de la majorité, et d'une majorité sans cesse décroissante.*"

compulsory clauses, the lack of which de Laveleye notices, they have not been added to Holland's educational legislation until last year (1900), and then only as the fruit of the successful working during ten years of the settlement made in 1889.

In 1871 a revision of the education law was called for and a Bill was presented with the object, not of altering the general principles of the legislation of 1857, but rather of improving the schools by augmenting the number of teachers, raising their qualifications, and fixing the proportion of teachers to pupils. The Bill never got as far as debate.

Finally, in 1878, a new education act was passed. An amendment was proposed by the religious parties during the debates, authorising the *communes* to subsidise denominational schools; but it was thrown out. Indeed the law actually defined "private" (*i.e.* denominational) schools who accepted communal grants to be *ipso facto* public (*i.e.* "neutral") schools. Public education, then, still kept its "neutral" character. The Liberals demanded the abolition of the pupil-teacher system, but it was retained. Pupil-teachers were, however, no longer to be reckoned in calculating the proportion of teachers to pupils. The communal authorities were once more authorised to give instruction absolutely free of cost. The *commune* retained the administrative powers conferred by the law of 1857, although the annual expenditure of the State on education now bore a direct ratio to the communal expenditure; and, as an immediate consequence, increased about ninefold. Whereas the State had formerly paid only the pensions of public school teachers after forty years of service, it now (by the law of 1878) undertook to make good to every *commune* 30 per cent. of its expenses.

The system of inspection was once more readjusted. Between twenty and thirty districts now took the place of the ninety-five districts created in 1857. Every district was to comprise at least two *arrondissements*. *Arrondissement* inspectors were honorary, though their expenses were paid; district inspectors received a fixed payment.

The following figures will show the position of schools at the dates 1857 and 1878 respectively, so far as it is possible to express such a thing in numbers. It should be remembered that a "private school receiving a subsidy from a *commune*" necessarily meant either a school that had severed its connection with a religious denomination or a school that had never had such a connection. In any case the receipt of a communal grant carried with it the "neutrality" of the school.

	1857.	1878.
Public schools - - - -	2,516	2,731
Private schools - - - -	957	1,095
Total number of schools - -	3,473	3,826
Private schools receiving subsidies from <i>communes</i> - -	25	120

A regulation issued soon after the new law had been passed provided that girls in training at normal schools should reside in the buildings, and that the men should live outside; also that a practice school should be attached to each normal school.

The law of 1878 created a financial problem and aggravated the long-standing religious difficulty. M. Moyersoen states that during the twenty-three years from 1857 to 1880 (that is to say during the financial *régime* established in 1857) only fifteen million florins were spent by Government on education. In the four years, 1880 to 1884 (that is to say so long as the financial *régime* of 1878 remained intact), the Government expenditure on education exceeded twenty-five millions. The same writer notes that, in spite of the enormous grants made by the State during these four years, the expenditure of the *communes* became every year more and more burdensome. The discontent of the religious bodies was, moreover, aggravated by a new provision empowering the King to determine how far the buildings of private primary schools should be subjected to the hygienic regulations enforced upon public schools.*

Two years after the new law came into force, *i.e.*, in 1882, the power of the King to apply these structural rules to private denominational schools was restricted to those private schools which received communal grants; and this meant, of course, private schools not connected with any denomination. Again, two years later, the law of July, 1884, relieved the Government's educational budget by excluding from the local expenditure, to which the State was liable to contribute thirty per cent., the large items of "maintenance of school buildings" and "furniture and apparatus." The same law reduced the legal proportion of teachers to pupils with the object of effecting an economy both for the Government and for the *communes*.

But these changes could not be expected to do more than temporarily relieve the pressure. "The school question had by then become a burning question; it agitated men's minds more than any other."† In 1883, through the influence of Heemskerk, a commission of sixteen members was appointed to examine into the possible modifications of the Constitution. The commission could not agree as to the form that the new constitutional pronouncement on education should take; and when the Government proposed its series of amendments in April, 1885, there was much disappointment that education

* *Vide* Moyersoen, p. 14. ". . . loin de terminer la lutte scolaire la loi de 1872 la poussa-t-elle davantage aux extrêmes, parce qu'elle rendait plus difficile la situation des écoles privées. Elle finit même par déplaire aux libéraux qui, cette fois, trouvèrent trop lourdes les charges dont elle grevait l'Etat."

† La question scolaire était devenue brûlante; nulle autre n'agitait davantage les esprits." Moyersoen, *op. cit.*, p. 15. This was true seven years later in 1890:—"s'il y a une question qui mérite d'être appelée la serrure brouillée de la politique contemporaine, c'est bien la question scolaire." Lacheret, p. 59

found no place among them. The pressure of public opinion compelled them, however, to make an attempt six months later (November 1, 1885.) After a series of amendments, which, like the proposed revision, centred in the question of gratuitous instruction, the Ministry was finally thrown out on the educational issue.

The proposal made by Dr. Schaepman is an interesting anticipation of the attitude finally adopted by the Government in 1889. It began with the words "education is free."*

The most important paragraph was as follows:—"The cost of the primary education given to the poor, or to those who, while not poor, are unable to pay the school fees, shall be returned by the State, according to a tariff, hereafter to be fixed, to the primary schools attended by those children." More important still was Dr. Schaepman's declaration during the debate of June 1st, 1887:—"Justice demands that the State Treasury, which is opened for the neutral school, shall be opened also for the denominational school. The latter cannot be branded as infamous; the assistance of the State cannot be pitilessly withheld from it. . . . The Chamber cannot put an end to the educational controversy; it is the consequence of the different points of view from which the various parties look upon life. But at least the Chamber can assure to all equal rights and the same freedom."

The proposal was eventually thrown out; and when the new constitution was published the original declaration of 1848 remained untouched. But it must not be supposed that this declaration implied that no grant could legally be made to denominational schools. Heemskerk himself declared that, in his opinion, a law apportioning grants to "private" schools would be constitutional; and we shall see that soon afterwards a law of this nature was not opposed as definitely unconstitutional.†

"Though the Dutch Protestants number only about 2,700,000 souls, there were in 1888 no less than 480 Bible schools supported by voluntary gifts, with 1,000 teachers and 79,000 pupils. These schools had an annual income of three millions of florins, they had a subscribed capital of sixteen millions of florins or about £1,340,000. During ten years their pupils were steadily increasing; they increased more rapidly than the pupils in the State schools, and in fighting the battle of denominational schools the Evangelical Protestants were supported by the Catholics. It was impossible to be blind to the significance of these facts, and when, in 1887, a lowering of the suffrage at last brought the anti-revolutionary party into power, a considerable section of the Liberals

* Constitution of 1848: "*L'enseignement est libre, sauf la surveillance de l'autorité.*" Proposal of Dr. Schaepman: "*L'enseignement est libre.*" Dr. Schaepman himself was a Roman Catholic priest, on the staff of the Seminary at Rijzenburg, and a distinguished orator and poet.

† See below, p. 334.

concurred with them in a compromise which was based on a system much like that which exists in England, and which has been very generally accepted." *

Soon after the elections of 1888 Baron A. E. Mackay, the new Premier and Minister of the Interior, put forth a remarkable memorandum, from which the following passages are here translated.

"Since in 1848,† education was declared free, if only unwillingly and because of the urgency of the problem, private instruction has accomplished, in circumstances little favourable to its development, so great an extension that now more than 27 per cent. of the children in the whole country attend private schools; and the legislator who has our national education at heart must reckon with them. In spite of the denial made even in 1878 of the possibility of rivalry between public and private education, that rivalry has none the less been excited in practice, and has profited alike the public and the private sections of primary education. The development and extension of private instruction are natural and welcome: natural, because there is perhaps no other country in which religious opinions are so divergent as they are in ours, and because the public school cannot satisfy those who desire for their children an education other than the so-called 'neutral' education given in public schools; and welcome, because it is this very increase in the number of private schools which proves clearly that parents attach great value to the education their children receive. Produced and developed as it has been by private initiative, free instruction, far from meriting our censure, has a right to the support of the State. The State is deeply interested in the education of the nation; the State alone can secure the existence of the national school everywhere and always. But the State is certainly not called upon to oppose private education, nor to place obstacles in its path to the detriment of the intellectual development of the nation.

"If it were possible for the state to get its expenditure on public education re-imbursed by those who profit by it, the problem presented to us since 1848 would be solved or nearly solved; but seeing that that is not possible, the State is obliged to supplement to some extent the expenses connected with education from the public funds, and that puts the private schools at an unfair disadvantage.

"If it is impossible entirely to remove this injustice, the State can at least help to modify it by no longer excluding private

* Lecky's "Democracy and Liberty," vol. ii., pp. 59, 60. See also Lacheret, p. 67, Note 2, where an account is given of the four great Societies that support the Christian and Bible schools.

† *I.e.*, since the constitutional declaration "*L'enseignement est libre, sans la surveillance de l'autorité.*"

schools from its assistance every time that it assigns a sum of the public money to a grant in aid of education. . . ."

The two main features of the law passed in December, 1889, by Baron Mackay's cabinet, were (1), the right of private denominational schools to receive Government grants; (2), the obligation of public schools to exact fees. The first meant that the Government proposed to give "private" schools a grant, in respect of every teacher in them, equal to the grant given to the *communes* for every teacher in the public schools under their control. The second characteristic of the law has been sufficiently explained by the account above given of the controversy over the question of gratuitous instruction. Some words of Dr. Schaepman's will make things still clearer. Theoretically and at first sight the question of gratuitous instruction seemed, he said, to require an affirmative solution. But "the language of practice is very different; every-day facts prove that in this matter the character and customs of the people must be reckoned with. Education free of charge: they are fine sounding words, but they make very little impression upon a people given to thoughtful calculation, and apt to estimate the value of things according to the number of crowns they cost. . . . With persons not in absolute poverty school fees act as an excellent spur; their effect is to make parents watch over the education of their children more carefully. School fees often have an excellent effect even upon the rich."

Naturally, however, the main argument in favour of compulsory school fees was the necessity of placing private denominational schools upon the same footing as public schools, if the hostilities between them were to have an end. And the objection that it would place the public schools at a disadvantage by compelling them alone to charge fees was hardly convincing. In theory, no doubt, the instruction given in "private" schools could be free of cost, and pupils could thus be won over from the public schools: in practice scarcely a single "private" school could afford to dispense with fees.† Moreover, the intention of the legislature was not to put the public schools at a disadvantage, but to make the choice of a school absolutely free for parents, so that no pecuniary interest should influence them one way or the other. "The law cannot place parents in a question of this nature in the dilemma—your purse or your conscience."‡ Finally, the Queen, by Article 46 of the law, was empowered to exempt a *commune* from this obligation upon proof that the exaction of school fees was an obstacle to its educational progress.§

* *L'argent de tous doit être employé au profit de tous. Pour favoriser réellement l'enseignement national l'Etat doit reconnaître et soutenir les écoles qui servent à l'instruction de la nation.* Lacheret, p. 74.

† Cf. Moyersoen, *op. cit.*, pp. 114, 126, 127, 24, 25, 29.

‡ Lacheret, p. 75.

§ Only three *communes* were exempted from the obligation of school fees in 1893.

The result of these provisions may be gathered from the following figures given by M. Moyersoen for January 1, 1893 Public Schools: 226,546 children received free education, *i.e.*, 48 per cent.; Private Schools: 56,552, *i.e.*, 27 per cent.

To revert once more to the first of the two principal features that distinguished the law of 1889. For a long period the State had claimed the right to impose certain conditions upon denominational schools. In particular, the teachers in them had from the first been upon the same footing as public school teachers, so far as the necessary certificates of qualification and moral character were concerned. To take another instance of the control exercised by the State over schools to which, under the old system, it contributed nothing, the law of 1878 had prohibited the use, for primary instruction, of buildings which had been declared insanitary by the Government Medical Inspector, while, as we have seen, another article of the same law (soon afterwards amended) empowered the Sovereign to apply the hygienic regulations for public schools to private denominational schools also. It was urged that, since the State could impose conditions upon private schools, it could not justly withhold from them its assistance. The right to exercise control over schools has often been claimed by those who contribute to their cost; and some held that the converse was no less reasonable and just—those who control schools should also contribute to them.

This feature of the law of 1889 is well put into its proper perspective in some sentences of M. Moyersoen's. "The solution most in conformity with the principles of the anti-revolutionary party would have been to make those who profit by the public schools pay for their advantages. It was this solution that the great apostle of the party, M. Groen van Prinsterer, had upheld in 1857. But in 1889 its application was no longer possible. The State ought to have created and supported a Governmental type of education in denominational schools; it had, in fact, attempted to compete with the denominational schools, and to place them in an unfair position of inferiority. It now renounced the struggle, and decided to profit equally by all educational effort."

The question whether or not the law accorded with the terms of the Constitution was not raised during the debates.* It was, however, questioned whether it was expedient to determine by legislation the right of denominational schools to Government subsidies. None the less, the law passed by a substantial majority in both Chambers. Its success was mainly due to the generous and liberal view of this national question taken by an important section of the Liberal party. The neutral school was still their ideal, declared this section of the party; but, since the nation

* So Moyersoen, who is generally accurate. That the constitutional aspect was discussed elsewhere, there is no doubt; but Lacheret (p. 78) seems to imply that it was dealt with also in the debates in the First Chamber.

had not been able to adopt the neutral school system contentedly, they would support the Government measure as at once a peace-offering, a guarantee of educational progress, and an equitable award in a contentious and long-standing difficulty.

The Liberal party renounced its long-cherished hope—the neutral State giving a neutral education to the whole nation by means of public schools; the clerical and the anti-revolutionary parties despaired of their ideal—the Christian State giving in denominational schools a Christian education to the whole nation. Both came to perceive that national unity is not to be sought for in any formula to be adopted by all men, whether that formula be negative or positive. They recognised, in fact, that as Matthew Arnold said, “the State is of the religion of all without the fanaticism of any.”

A Royal decree of April 18, 1890, extended the new law in some matters of detail. These, together with the law of 1889, will be dealt with in another paper. But there are two points which demand notice here. Article 11 of the Decree of 1890 obliges the *communes* to exact a school fee of at least 40 centimes from all those who are not really poor, except in cases where the Queen gives a dispensation. Article 12 admits the principle of subsidies to schools kept by private individuals, but stipulates that such schools, to receive a subsidy, must be directed by an institution or society recognised by the Government.

Finally, in September, 1895, a slight improvement in favour of denominational schools was effected by an addition to the law of 1889. Private denominational schools by that law were to lose their right to a subsidy if a vacancy as headmaster lasted more than six months or as undermaster more than four months. The addition of 1895 gave the Chamber power to excuse the managers from this obligation (*i.e.*, to grant the subsidy, though the conditions were not fulfilled) provided they were satisfied with the managers' declaration that they had been unable to procure a teacher in spite of their offers of adequate salary (*malgré l'offre d'un traitement convenable*).

The system established by the law of 1889 is still in force. It may be held to have effected a final settlement of the only serious difficulty which had obstructed the progress of education in Holland.* The act of 1900 embodies a few small changes; but in reality it implies only that compulsory attendance has been grafted on to the existing system.

So long as the religious difficulty was still acute, to enact compulsory attendance would have been impossible. The successful working during the past ten years of the compromise made in 1889 with the religious interests in education has

* Although the attitude of the supporters of denominational schools towards the law of 1889 has been summed up in the phrase, “*Dankbaar maar niet voldaan*”—grateful, but not satisfied.

rendered compulsory attendance practicable, if it has not succeeded in making it welcome.

Finally, since a history may, by established custom, conclude with a moral reflection, the following sentences written by Matthew Arnold forty years ago may be commended to all who are concerned with, or interested in, the subject: "The power which has to govern men must not omit to take account of one of the most powerful motors of men's nature—their religious feeling. It is vain to tell the State that it is of no religion; it is more true to say that the State is of the religion of all its citizens, without the fanaticism of any. It is most of the religion of the majority, in the sense that it justly establishes this the most widely. It deals with all, indeed, as an authority, not as a partisan . . . it allows no one religious body to persecute another; it allows none to be irrational at the public expense; . . . but it does not attempt to exclude religion from a sphere which naturally belongs to it; it does not command religion to forego, before it may enter this sphere, the modes of operation which are essential to it; it does not attempt to impose on the masses an eclecticism which may be possible for a few superior minds. It avails itself, to supply a regular known demand of common human nature, of a regular known machinery."

The system established by the law of 1889, the debates upon the law of 1900, and the general situation of primary education in Holland at the present time, will be more conveniently dealt with in separate articles. For these subjects belong to the actual present, while so far we have been dealing with a development which, if recent, is yet, properly speaking, historical.

As an aid towards a better understanding of this development and a supplement to the few remarks upon contemporary politics that have crept into this fragment of educational history, a table of chronology has been drawn up giving (in the left-hand column) the political events of Holland, and (in the right-hand column) the landmarks of the educational progression which has just been described.

CHRONOLOGICAL TABLE.

Political Events in the Netherlands. Educational Changes in
the Netherlands.

APPENDICES.

- A. The Ministerial Circular of May 30, 1806, together with some of the answers made by the various Religious Bodies.
 - B. Four Details in regard to Dutch Schools, 1800 to 1840 :—
 - (i.) Labarre's "Phonic Method," 1802.
 - (ii.) The "Simultaneous Method" of Instruction, 1830 to 1840.
 - (iii.) School Furniture, 1838 and 1850.
 - (iv.) Class-divisions in a Dutch Primary School, 1830 to 1840.
 - C. Bible Teaching in Dutch Primary Schools. Extracts from an Article in Schmid's *Encyklopädie*.
 - D. Some generalisations about the effects of Dutch Primary Education upon the National Character. By Prof. Alphonse Leroy, of the University of Liège. 1860.
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CHRONOLOGICAL TABLE.

POLITICAL EVENTS IN THE NETHERLANDS.	EDUCATIONAL CHANGES IN THE NETHERLANDS.
War declared by England against Holland. 1780.	
Joseph II. demands free navigation of the Scheldt and revises old Imperial claims in Maestricht. Dutch resist, supported by Prussia and Sweden. 1784.	
Treaty of Fontainebleau between Joseph II. and the Dutch. 1785.	1785. Foundation of the Society for the Public Welfare.
The "Patriot" party in Holland deprive Stadtholder of the command of the army. 1786.	
England and Prussia interfere in Holland on behalf of Prince of Orange. The Prince is restored. 1787.	
Joseph II. declares the Netherlands a province of the Austrian monarchy; but opposition, headed by Van der Noot, forces him to revoke the union. 1787.	
Triple Alliance formed between England, Prussia and Holland. 1788.	
Revolution in Belgium against Austrian rule. Van der Noot enters Brussels. 1789.	
Belgium throws off Austrian rule and declares itself a Republic.† 1790.	
Death of Joseph II. (Feb.) 1790.	
In Belgium, the democrats are overthrown by party of Van der Noot. Austrians reoccupy the country. 1790.	
National Convention of France declares war against the Stadtholder: French Republicans invade Holland. 1793.	
French conquest of Holland. 1794.	
French enter Amsterdam: William V. (Stadtholder) escapes with his family to England from Scheveningen. 1795.	
The Batavian Republic established in alliance with France. 1795.	1796. Suggestions for State control of Education presented to the National Assembly.
Battle of Camperdown: defeat of Dutch fleet. 1797.	1797. Magistrates of Amsterdam erect schools for the poor on plans suggested by the Society for the Public Welfare.
New Constitution drawn up. 1798.	1799. Creation of the Agency of National Education.
	1801. FIRST EDUCATION LAW: Government inspection and grants to teachers.
	1803. Extension of law of 1801.
New Constitution, Schimmelpenninck Grand Pensionary: abolition of the Council of the Interior. 1805.	1805. Grand Pensionary presents new education law.
Louis Bonaparte, King of Holland. 1806.	1806. Law of 1806 passed by Batavian Republic; promulgated April 3: ratified by Louis Bonaparte.
January: cession of Zeeland. July 1, abdication of Louis Bonaparte. Holland annexed to French Empire, July 9. 1810.	SECOND EDUCATION LAW: Inspection, registration, assistance.
Kingdom of the Netherlands formed for the House of Orange by union of Holland, Belgium, and Luxemburg. William I., King of Holland. 1813.	[1811. Cuvier visits Holland and reports to University of France on its educational system.]

CHRONOLOGICAL TABLE—*continued*.

I. EVENTS IN THE NETHERLANDS— <i>cont.</i>	EDUCATIONAL CHANGES IN THE NETHERLANDS— <i>cont.</i>
of East Friesland ceded to 1814. r. and Belgian Netherlands 1815. by Congress of Vienna. ental Law." 1815.	1815. "Fundamental Law" (Art. 226) contains reaffirmation of principle of State control of Education.
a of July in Paris. Rising in 1830. : Secession of Belgium from London Conference on the question.	1816. Establishment of Normal Schools at Haarlem and at Lierre.
, King of Belgium. London 1831. nce frames Belgian Constitu- tute invade Belgium. Eng- l France support Leopold.	1830. Bill permitting private persons to found schools thrown out by States-General. Royal Decree favouring foundation of denominational schools.
Antwerp. English fleet 1832. as coast of Holland. recognises independence of 1833. by preliminary treaty.	1831. Belgium in new Constitution allows full "freedom" of instruction.
1 Belgium. William I. accepts 1839. ard of London Conference.	[1836. Victor Cousin visits Holland and reports on its education.]
abdicates. 1840.	1842. Decree making clergy eligible for Provincial Inspection Commissions, &c.
William I. 1843.	1848. Revised Constitution declares education to be free, though under supervision.
l. gives new Constitution. 1848.	1854. Bill dealing with both Secondary and Primary Education withdrawn.
William II. : William III. 1849. throne.	1855. Bill similar to law of 1806 introduced by Conservative party.
atholic hierarchy reestablished. 1853.	1857. THIRD EDUCATION LAW : "Neutrality" of public schools continued.
ing "civil personality" of 1855. ons.	[1858. De Laveleye publishes his "Débats. . . de 1857."]
inundations. 1861.	[1861. Matthew Arnold's report.]
slavery abolished. Pro- 1863 t Ministry. to 1866.	1863. Law making Burghers' Schools "intermediate" instead of primary.
stry : M. de Thorbecke. 1868.	1867. Attempt by Orthodox Protestants to better position of "private" schools.
Dutch Guinea to G. Britain. 1871.	1868. Heemskerk's proposal to restrict communal power to exempt from school fees.
stry : M. Devies. 1872.	Kuyper's proposal : <i>système de restitution</i> .
	[1871. De Laveleye publishes his report on Holland in " <i>L'Instruction du Peuple</i> ."]]
	1871. Abortive Bill to improve schools, especially with regard to teachers.

CHRONOLOGICAL TABLE—*continued*.

POLITICAL EVENTS IN THE NETHERLANDS— <i>cont.</i>		EDUCATIONAL CHANGES IN THE NETHERLANDS
New Ministry : M. Heemskerk.	1874.	
New Penal Code.	1875.	
New Ministry : Van de Capello.	1877.	1878. FOURTH EDUCATION State contributes 30 per cent. of schools.
New Ministry : Van Lynden.	1879.	[1878. Dr. Steyn-Parvé's book published.
		1882. King's power to apply hygienic to "private" schools restricted.
Heemskerk's 2nd Ministry.	1883.	1883. Catholic and Anti-Revolut parties demand revision of edu law in new Constitution.
Committee to revise Constitution.	1884.	1884. Government expenditure on edu relieved, and legal proporti teachers to pupils reduced by July.
		1885. March 1: Education omitted Constitutional Revision. N ber 1: Government forced to declaration on Education. F Liberal Ministry.
New Constitution published Novem- ber 30.	1887.	1887. Dr. Schaepman's proposal : new C tution merely repeats constitu declaration of 1848 on education
New composite Ministry under Baron Mackay (anti-revolutionary).	1888.	
		1889. FIFTH EDUCATION LAW : ment of denominational school tion.
King declared by Parliament incapable of conducting Government. Death of William III. Queen Wilhelmina.	1890.	1890. Royal Decree fixing amount of fees and otherwise completing 1889.
New Ministry : Vantienhoven.	1891.	
Labour Riots.	1892.	
New Ministry : Jonkhen Roell.	1894.	1895. Addition of clause to law of 1 favour of denominational managers.
		[1895. M. Moyersoen publishes his bo Dutch education.]
		[1896. M. de Loos' book on Dutch tion.]
Suffrage Extension Act.	1896.	
New Liberal Ministry : Minister of the Interior, M. Goeman Borgesius.	1897.	
Obligatory personal military service Act.	1898.	
Coronation of Queen Wilhelmina.		
Marriage of Queen Wilhelmina (Feb.)	1901.	
New Ministry (Dr. Kuyper Prime Minister) July.	1901.	1900. SIXTH EDUCATION LAW : pulsory education.

NOTE.—In 1894 the Budget deficit was 3 million florins; in 1896 the national debt was converted from 2½ per cent. to 3 per cent.; 1897, deficit of 3,330,000 fl.; 1898, deficit of 6,300,000 fl.

APPENDIX A.

THE MINISTERIAL CIRCULAR OF MAY 30, 1806, WITH SOME OF THE
ANSWERS MADE BY THE VARIOUS RELIGIOUS BODIES.

The following is the circular letter addressed by the Minister of the Interior to the religious bodies in May, 1806. It will be found in French in Buisson's "*Dictionnaire de Pédagogie et d'Instruction Primaire*" under *Pays-Bas*, and in English in Mr. Horner's translation of Cousin's Report (Appendix B., p. 233). Horner also gives a translation of several of the answers received. The circular and the extracts from the answers to it, which will be found below, have been taken from his book.

After a few general remarks the circular of the Minister of the Interior (addressed to "all Synods of the Reformed Church, both Dutch and Walloon; Consistories of the Lutheran Church, Remonstrants, and Menonites; and Prelates of the Roman Catholic Church) proceeds as follows:—

" . . . the Government expects that you will give your support and assistance to these educational establishments; and invites you, by the present communication, to employ your powerful influence for that end.

"There is one especial part of the education of the young in which the Government claims your co-operation, namely, their instruction in the doctrines of the different communions.

"You must be well aware that throughout the whole extent of our country, there has, hitherto, hardly existed a single school in which the master has given a properly regulated religious education. Religious instruction in the schools has gone no farther than to impress upon the memory of the children, and make them repeat, the questions and answers in some catechism. There was, however, no ground to expect more from the masters for several reasons. Although the Government indulges the hope that the newly established schools will lead to the salutary result that a regularly organised system of instruction in the Christian religion, in so far as concerns the historical parts and Christian morals, will be gradually introduced, yet, in the present state of things, it does not consider itself entitled to impose an obligation upon the masters to teach the doctrines of particular sects.

"If Government has thought it necessary on that account to separate instruction in particular doctrines entirely from ordinary teaching in the school, it does not attach less importance to the duty of providing that the children shall not be deprived of that instruction; and therefore, having full confidence in your good dispositions to promote these salutary ends and the welfare of the young, Government has considered that it could adopt no measure more effective than to address the different ecclesiastical bodies in this Republic; and to invite you, as I now do by this letter, to take upon yourselves the whole religious instruction of the young, either by properly arranged lessons in the catechism, or by any other means. I shall be glad to learn what measures you may adopt; whether they are to be new, or the revival of former methods. . . .

" . . . I conclude with commending you to the protection of the Most High.

"May 30, 1806.

"HEND. VAN STRALEN."

The answer of the Synod of the Dutch Reformed Church in South Holland consists mainly of a description of the measures to be adopted by

them in accordance with the last paragraph of the circular. Some general remarks were, however, made in this answer.

This Christian Synod has received with heartfelt joy this mark of confidence in the zeal and good dispositions of the ministers of the reformed religion. Honoured by this confidence, the Synod assure your Excellency that the ministers within their jurisdiction have never ceased to render themselves worthy of it, either by giving religious instruction, or by other unwearied exertions . . . in which they will continue with the same zeal, flattering themselves that the intention of the Government, so clearly manifested (and of which the Synod have never entertained a doubt), will wholly eradicate the prejudice excited against the new schools, that they would have a tendency to suppress instruction in the doctrines of religion, and substitute, in their stead, doctrines and exhortations merely of a moral nature; and the Synod will therefore most sincerely exhort the ministers within their jurisdiction to continue to do that which they have always hitherto done, namely, to recommend, in their sermons at church, in their pastoral visits, and upon all occasions, an assiduous attendance at school."

There are some other noteworthy phrases in the same letter, of which two may as well be quoted here. "The masters ought never to miss an opportunity of instilling into the minds of the pupils that it is an honour and an advantage to attend the religious instruction." The second quotation is the only portion of the letter that does not seem entirely sincere. The committee of the Synod will impress upon the governors of the orphan asylums and workhouses "the great importance which the Government attaches to religious instruction, and *especially the doctrinal parts, etc.*"

A decree or "minutes" was sent in answer to the Synods of the Reformed Churches, dated 25th September, 1806. It contained the following passage:—

"These various measures open up a prospect, which widens every day, of the happiest results from the benevolent intentions of Government in favour of the young; and justify a fervent hope that by the powerful support which . . . the schools will henceforth receive from the Reformed and other churches, the work of improving the schools which has been commenced, will become, under the divine blessing, a powerful auxiliary in spreading moral and religious sentiments throughout our native land, which, in former days, held in these respects so eminent and so dignified a position. This sacred object the Government will never cease to keep in view, etc."

One of the answers from the Roman Catholics assured the Minister that "the Roman Catholic clergy will most willingly undertake to instruct the children in the doctrines of their religion, and will teach them the catechism in the churches. . . ." But the most remarkable of the Roman Catholic replies was that from the Archbishop of Friesland. "*J'ai lu le contenu de la missive de Votre Excellence avec allégresse, et je me flatte que moi et les curés de cette province nous répondrons de tout notre pouvoir aux vœux salutaires du gouvernement batave, et que nous montrerons que nous ne sommes pas indignes de sa confiance. Pour voir régner la concorde, l'amitié, et la charité entre les diverses communions il est nécessaire, à mon avis, que les institutions s'abstiennent de l'enseignement des dogmes des diverses communions. "In order to see harmony, friendship and charity reign between the various communions it is, in my opinion, necessary that schoolmasters should abstain from teaching the dogmas of the various sects."* The letter also contains an excellent description of the evils of sectarianism in schools "*. . . les enfants apprennent trop tôt qu'ils diffèrent de religion; l'un fait des reproches à l'autre; et beaucoup d'instituteurs ne se mettent pas en peine de l'empêcher. Ce n'est d'abord, à la vérité, qu'un enfantillage; mais cependant, les enfants croissent, et l'éloignement augmente de plus en plus; la rancune se fixe dans le cœur, et toute leur religion n'est souvent qu'un faux zèle que le véritable esprit religieux et la charité chrétienne réprouvent et détestent.*" The letter concludes with

an assurance that "although by the discipline of our Church instruction in the dogmas of the faith is enjoined, nevertheless, the exhortations of a Government that sets so high a value on the welfare of the young will carry us forward with increased ardour in the fulfilment of our duties."

The letter from the Consistory of the Reformed Lutheran Church begins with the words, "We have heard with delight," but the rest of the letter is commonplace if cordial.

The Consistory of the Mennonite Church of Harlingen desired "to express their earnest wish to aid, as far as depends upon them, the beneficent exertions of the Government in this matter, and they flatter themselves that the establishments which are now devoted to that object . . . in their community will respond to the wishes which the Government has manifested."

The Consistory of Christians of the Confession of Augsburg congratulated the country on the interposition of Government for the betterment of primary schools, and undertook to use its "most cordial endeavours to second the efforts of the Government by every means in its power."

These extracts show how well the circular of May, 1806, was received by the various religious bodies. They have been set forth here because it is important to realise that, when the system of primary education was established in Holland, the religious difficulty did not exist, except perhaps in embryo. That difficulty developed under the law of 1806, not, however, because of the actual provisions of the law, but owing to the method in which they were interpreted and administered by succeeding Governments.

APPENDIX B.

FOUR DETAILS IN REGARD TO DUTCH SCHOOLS, 1800-1840.

(i.) It was in Holland in the year 1802 that Labarre, then a refugee invented the "phonic method" of learning the alphabet. By this method the children in infant schools learn the "powers of letters" in small words and afterwards their names. The method was introduced into all the Dutch schools by M. Prinsen, who was always ready to adopt for Holland educational devices that had survived the test of experience elsewhere.

For a description of the phonic method as actually followed in a Dutch school in 1850, see "Chambers's Edinburgh Journal," vol. xiv., p. 260.

(ii.) The method of instruction known as the "simultaneous method" (by contrast with the "Mutual Method" then used in the Lancasterian schools and to some extent imitated in France) was a feature of the Dutch schools when Dr. Kay (afterwards Sir James Kay-Shuttleworth) wrote in 1838.* "In the Dutch schools 50 children are, on the average, instructed in a class by one master. This class is often taught in a room common to it with other classes. . . . The simultaneous and mixed methods of instruction which are now adopted in the schools of Switzerland, Prussia, Germany, and Holland, form an essential feature of the internal economy of a school in which it is proposed to teach 40 or 50 children in each class."

"In 1825 a prize was offered by the Society for the Public Good for the best essay on the advantages and disadvantages of the monitorial system, and the simultaneous or class system of instruction. The prize was awarded to a dissertation by M. Visser, Inspector of Primary Schools in Friesland. In his essay, the system of monitorial instruction is analyzed, and proved to be unsound in every point which bears upon education in the best sense of that term. This essay was published and widely distributed by the Society, and contributed to form and strengthen the opinion which prevails in Holland against the method of mutual instruction."†

(iii.) Dr. Kay goes on to recommend that "the desks and forms should be arranged as in the Dutch schools, the scholars being all placed with their faces towards the teacher in successive lines of desks half the usual width. The scholars retain their places while the lessons proceed, the chief demonstrations being given on a large blackboard suspended on the wall or on an easel opposite to the class. The teacher during the reading, spelling, and writing lessons, sits on a platform, slightly elevated, opposite the centre of the first bench." There is a curiously antiquated flavour about this description of the furniture of a Dutch primary school in 1838. But it would require an expert in the history of the school-furniture trade to tell us how far the desks and rooms of the English schools were influenced by Dutch models in the 'thirties.

Another writer ("Notes from the Netherlands," Chambers's Edinburgh Journal, vol. xiv. p. 260,) speaks of "a long building, divided into three square apartments by partitions fitted with sliding glazed doors. Each room contains four sets of desks and forms, placed so as to leave a passage

* "Poor Law Commissioners' Report on the Training of Pauper Children," 1841. See pp. 45, 46.

† Barnard's National "Education in Europe," 1854.

all round close to the walls, and at right angles across the centre ; and each room was occupied by boys and girls, two sets of desks appropriated to one sex and two to the other." This was in 1850.

In another passage (vol. xv. p. 334) the same writer speaks of a school-house as "built of brick, well-lighted, and in good condition, decidedly the best building in the place . . . the interior was perfectly clean and well-ordered ; fitted with desks, closets, and shelves, with piles of books placed ready for use on the latter, and maps hanging on the walls."

(iv.) More interesting still, and especially since the fact is not mentioned by other writers on this subject, is Dr. Kay's statement that the Dutch schools "are commonly divided into four classes, denominated 1. the preparatory ; 2. the elementary ; 3. the middle ; 4. the superior ; the range of instruction given being greatly superior to that which is imparted in any of schools of the working classes in this country."*

* Report on the Training of Pauper Children, 1841, p. 46.

APPENDIX C.

BIBLE TEACHING IN DUTCH PRIMARY SCHOOLS.

Extracts from an article in Schmid's *Encyklopädie des gesammten Erziehungs—und Unterrichtswesens*. (1873.)

The Bible at first still retained its place in the Communal Schools, and it was not until about the year 1816 that it began to disappear from them. The reading of the Bible was restricted in the province of North Holland by a decree of the Governor in 1821. After 1830 there seems to have been a willingness to adopt a better course, as when in 1835 the provincial school commission of Groningen directed in a circular addressed to the teachers, that "The Bible ought to be read and explained catechetically, and exemplified by the teacher in his daily life." In 1842 attention was again called to this provision. An ordinance was soon after issued by the Governor of South Holland, forbidding the reading of the Bible "even in schools that were attended exclusively by Protestant children." "The use of the Bible in schools is still (1860) to be met with only in exceptional instances . . . in parishes that are wholly Protestant."

In 1842 a Bishop in South Holland complained, in an address to the provincial authorities, that the rights that had been assured to the Roman Catholic population were violated by instruction in Biblical history.

Visser, a partisan of the neutral school and a superintendent of schools in Friesland wrote in 1821 :—"In the religious and moral training of most of the schools there is very much to be desired. On account of the banishment of the catechism and the prohibition of the unrestricted use of the Bible, many teachers have become of the opinion that henceforth everything relating to the service of God must be excluded from the schools. Hence they have introduced, in place of what has been removed, a dry compilation of moral precepts, which are well adapted to train up the children to be theorists, but in no respect to make them practical people."

As an instance of these dry compilations of moral precepts, the following extract from a book entitled "Instruction for School-Teachers," and written by a clergyman and a Government Inspector of schools, may here be added. It is an interpretation of the clause in the law of 1806 as to "the virtues, both Christian and social." The writer admonishes the teachers to make the children "attentive to the First and Almighty Giver of all things, not by "dry reasonings and sermonising"; but, he advises, "while talking with the children, make them observe the evil consequences of an excessive drought, or of too abundant rain; show them that it is in no man's power to produce even so much as a drop of rain, and that we are all dependent upon God, &c. In this way, it appears to me, God and His virtues ought to be made known first and above all. This is the right religious teaching which should be given in all schools, since it is suitable for all children, to whatever Christian denomination their parents may belong." Well may the "Dutch Clergyman" from whose article in the *Contemporary Review* (vol. vii. p. 395) this extract is taken, observe "This sounds 'social' enough, but where is the 'Christianity'?"

APPENDIX D.

SOME GENERALISATIONS ABOUT THE EFFECTS OF DUTCH PRIMARY
EDUCATION UPON THE NATIONAL CHARACTER, BY PROFESSOR
ALPHONSE LEROY, 1860.

A reasoned and philosophical statement as to the general effects of their primary education upon the character of the Dutch people could hardly be attempted except by a student who possessed something like an intimate knowledge of Dutch life. Since any judgment passed upon Dutch education in 1860 must need very considerable modification in the light of the last forty years, it has seemed better to relegate to an Appendix the following very interesting generalisations made by Prof. Leroy, of the University of Liège, Belgium. It should be remembered that they were written a few years after the law of 1857 came into operation.

"The influence of Pestalozzi has continued predominant. The method of simultaneous instruction has met with more favour in Holland than the monitorial, 'which certainly communicates information,' as Van der Ende says, 'but does not educate; whereas the object of instruction is education.' But as respects method, the Hollanders are peculiarly eclectic, their calm temperament, their prudent and considerate character, protect them from any ill-bestowed admiration, they are no friends to a stupid adherence to ancient usages, but they would listen to the teachings of experience, and examine before they decide. Imagine yourself in the position of the child—adapt your instruction to the gradual development of his faculties, and never lose sight of his destiny as a citizen and a man, teach him not merely to read but put him in a condition to reason understandingly upon what he has read; these simple principles are sufficient, in the opinion of the Hollanders, to destroy for ever the pretensions of the Lancasterian system. They have retained nothing of it but merely the principle of repetition in some physical branches. But the attempt to avoid one extreme exposes them to the danger of falling into another. And so the influence of the spirit evinced by the regulations of 1806 might be looked upon as in some degree dangerous, so long as the new system was carried out with all that zeal that is wont to be called forth by newly achieved success. It has been asserted that the teachers in their desire to make instruction in the public schools such as should improve the understanding would produce a change in the character of the people, make them peevish and conceited, and dissatisfied with their condition; that the culture and development of the finer feelings would be checked rather than promoted by a method of instruction in which, in direct neglect of all moral training, the intellect and the formalism of logical deductions always receive the chief attention; and finally, it has been apprehended that, were the habits thus created to be carried too generally into unrestrained practice, sooner or later discipline would be endangered, and the respect that is due to others would be supplanted by insolence and insubordination. It must be admitted that these apprehensions have many times been verified, though not so frequently as has been represented; and as proof of this, we may point as well to that entire absence of the ideal, that is characteristic of many of the Dutch, as to the ultra-rationalism

and much more to the selfish individualistic tendencies that are now becoming prevalent among the young men of the cities.

"Some may be disposed to ascribe these manifestations to national phlegm, which prefers the culture of the intellect to that of the sensibilities, and the wide-spread spirit of Calvinism; and they may assert, in fine, that this system of training is the best adapted to the character of the people. Granted; but it is not well to encourage by a partial course of treatment those propensities, which, indulged too far, become faults. It cannot be concealed that many very intelligent men in Holland are becoming daily more strongly of this opinion, and in this we recognise a returning current of feeling that promises much for the future.

"Nevertheless the reform of 1806 has merited the thanks of the people of the Netherlands. An intelligent administration was on the watch to arouse a spirit of emulation among its officers; zealous teachers, who in general are more highly educated than those in many other countries, a strict discipline, that is based more upon the moral influence exerted by the teachers than upon any express regulations; these agencies were sufficient to assure improvement and to accomplish a brilliant result."

III

THE PRESENT SYSTEM OF PRIMARY EDUCATION
IN THE NETHERLANDS.

UNDER THE LAWS OF 1889 AND 1900.

A superficial study of the vicissitudes of the Primary School system in Holland might lead one to suppose that the whole educational tree had been uprooted once or twice since it was planted in 1806. Such an impression would indeed be a superficial one. The main characteristics of the Dutch Primary School have remained from the first without any very noticeable change, until the Compulsory Act was passed this year. The controversies and the changes have mainly concerned those Primary Schools that were altogether outside the Government system of education until 1889; and perhaps the only important point in which the position of the *public* Primary Schools has been from time to time materially affected, is their financial relation to the local and the central authorities. It has not made much difference to the individual pupil of the public Primary School, that the word "Christian virtue" has been retained in the legal definition of religious neutrality; nor has it been of much significance to him, whether the State should pay 30 per cent. of all communal expenditure, or 25 per cent. only of the cost of building and maintenance. Beneath all changes—the decree of 1842, the two Constitutions of 1848 and 1887, the laws of 1857, 1878, and 1889—the education of the Primary School has remained much the same, and it is still worthy of the praise given to it by Cuvier, Cousin, Kay-Shuttleworth, and Matthew Arnold.

The law of 1889 begins with a definition of the extent to which it applies in the domain of education. One exception only is made: all other schools are subject to the new legislation. This one exception is the "home instruction" given in some families, and is defined as "the instruction given in common to the children of at most three families at the house of the head of one of those families."

"Public Education" then, in Holland comprises charitable schools, convent schools, industrial, reformatory or correctional schools, inasmuch as since the year 1890 almost any private school can become "public" by receiving Government grants while retaining its "private" or denominational character.

There are, however, certain types of schools to which the law does not apply at all. Those in which only singing, drawing, gymnastics, manual work, and elementary agriculture are taught

do not come within the meaning of the Act, nor do schools where the children are under six years of age and the instruction is merely preparatory. Not even the qualifications of the teachers in such schools are determined by law.

Again, there are other schools to which the law applies only partially, *i.e.*, schools in which certificates of qualification are required of the teachers, but which, with this exception, are independent of the regulations for Primary Schools. These types of school are:—

- (1.) Military Schools.
- (2.) Schools for the deaf and dumb, blind, stammerers, and mentally defective.
- (3.) Schools established in prisons, or in poor-law workhouses (*dépôts de mendicité*).

Primary are distinguished from Intermediate Schools (*écoles moyennes—middelbare scholen*) not merely by the difference in their educational aim nor mainly by the age of the pupils attending them, but rather by the matter of the instruction given in the one and the other respectively.

We are here dealing solely with Primary education, and, therefore, need only give a list of the subjects taught in Primary Schools, distinguishing those which are optional (or “elective”) from those which are obligatory (or “required”).

The *obligatory* subjects of instruction in Dutch Primary Schools are ten in number, namely:—

- (1.) Reading.
- (2.) Writing.
- (3.) Arithmetic.
- (4.) Elements of the Dutch language.
- (5.) Elementary history of the Dutch nation.
- (6.) Elements of geography.
- (7.) General principles of the natural sciences.
- (8.) Singing.
- (9.) Elements of drawing.
- (10.) Useful manual work such as sewing, knitting, etc. (French: *ouvrages manuels d'utilité*.)
- (11.) Yet another subject is obligatory, unless the parents of a child particularly request that he or she should be excused from it. This is a form of what we call Physical Training (French: *exercices de maintien: exercices libres ou d'ordre de la gymnastique*).

These obligatory subjects are taught in all public schools without exception, and no excuse is admitted for the omission of any one of them.

The optional subjects are only taught when there is a reasonable number of pupils who desire them. The decision as to this rests with the communal council, subject always to the interposition of the “Deputation,” or of the Crown; but the existence of Intermediate Schools in the district does not

absolve the *commune* from its obligation to teach the optional subjects if such instruction is needed. Intermediate instruction and the optional parts of primary instruction are, in fact, viewed as the materials of two different types of education neither of which can take the place of the other.

No *commune*, then, may omit any one of the obligatory subjects nor decline to teach the optional subjects when required. On the other hand, no *commune* may allow any subject not mentioned by the law to be taught. They have power to establish schools preparatory to the Primary Schools and Higher Primary Schools. In a large number of schools one or two of the optional subjects are taught, French and Mathematics being the most usual choice.

Pupils can be excused from the Physical Training (above No. 11), but from no other obligatory subject.

There are nine *optional* subjects in Primary Schools:—

- (1.) Elements of French.
- (2.) Elements of German.
- (3.) Elements of English.*
- (4.) General principles of Universal History.
- (5.) General principles of Algebra.
- (6.) Design.
- (7.) Principles of Agriculture.
- (8.) Gymnastics.
- (9.) Ornamental manual work, lace, etc. (French: *ouvrages manuels d'agrément*).

As a general rule, however, *communes* in which there exists an Intermediate School do not provide for the teaching of any of these optional subjects in their Primary Schools, except the rudiments of French. This subject is often taught because it is required of children of twelve years who wish to enter an Intermediate School.

Primary Schools, being thus distinguished from Intermediate Schools by their course of study, are distributed by definition among two classes, *public* and *private* Primary Schools, the first meaning those founded or maintained by the State or the *commune*, the second those not so maintained. But it was the distinctive feature of the legislation of 1889 to permit of subsidies being granted by the State to private schools.

It is to be noticed that while the State is permitted, the *commune* is expressly forbidden, to give grants-in-aid to private Primary Schools. It can only be done, that is, by the central authority. There are, however, certain special circumstances provided for by the law in which direct or indirect help may be

* It was remarked in 1851 that English was much studied in the Netherlands, "scarcely a mercantile counting-house in which one or more of the clerks cannot speak it as well as French or German in addition to their own language." Chambers's Edinburgh Journal, vol. xv., p. 73.

given by the *communes*. They have always power to give rewards for regular attendance to pupils of private schools.*

Local Authorities.—The Constitution, as revised in 1848,† decrees that "the constituted authority shall organise adequate public primary education in every district of the Kingdom. The organisation of public instruction is regulated by the law; and this respects the religious opinions of each individual."

The application of these constitutional principles is defined by Article 16 of the law of 1889.

"Article 16. *In every commune sufficient primary education shall be given in an adequate number of schools; these schools are open to all children without distinction of religious opinions.*"

If all the children in a *commune* are attending a private denominational school it would be the duty of the commune to organise a public school only if the parents made a request for it. While it would be wrong to close a public school on the ground that all the children who attend it would attend some private school if there were no public school, it would be equally wrong to organise a public school on the ground, or the supposition, that a certain number of parents would by preference send their children to such a school.

The object which the law has in view is obviously this: no child must be forced to attend a private denominational school, and therefore parents who prefer for their children a public school education must be able to obtain it in their *commune*. From this it is clear that the extent of the obligation upon the *commune* really is that all children whose parents prefer a public school must be able to obtain places in one.

The decisions of the communal council on the number of schools are however subject to the approval of the "Permanent Deputation" of the Province, which has power to order any increase, after hearing the opinion of the inspector of the district.

The *commune* is represented by the communal council; the administration is entrusted to a Board of Aldermen, over which the Burgomaster presides. His position is similar to that of a French Mayor. He is nominated by the King on the proposal of the Royal Commissioner of the Province. The aldermen are chosen by the Communal Council from within its own ranks.

It will be convenient here to explain the meaning of the term "Deputation," which will frequently occur in what follows. Every Province is administered by an officer of the Crown

* M. Moyersoen gives a good example of what *communes* are not entitled to do under the law, "*Notons à titre d'exemple, qu'il serait interdit à une commune de donner aux parents, sous quelque forme que ce soit, comme secours ou autrement, l'argent dont ils ont besoin pour payer la rétribution scolaire d'une école libre.*"

† In spite of much discussion no change was made in Article 194 of the Constitution of 1848 when the revision of the Constitution took place in 1887. The revision went on from 1883 to 1887. The number of this education Article is now 192. The phrase referred to in the text is in French, "*Partout dans le royaume il sera donné par les soins de l'autorité un enseignement primaire public suffisant.*"

(*commissaris des Konings*), who is charged with the carrying out of the laws, decrees, and administrative orders of the central authority. These "commissaries" preside over the "Provincial States" (*Provinciale Staten*) and enforce their decisions. The members of the "Provincial States" are directly elected by the people for a term of six years. From among themselves these bodies elect a "permanent deputation," or permanent committee, here referred to as the "Deputation" (French: *états députés*). The "Deputation" represents the provincial government when the Provincial States are not in session, and, since the States are only convened upon the order of the Minister of the Interior, the "Deputation" is for all practical purposes the local authority for the Province. It consists generally of six members, and has two sessions in every year.*

The definition of an "adequate number of schools" is further modified by the regulation that no public school may contain, without express Royal authorisation, more than 600 pupils.

But two *communes* whose borders coincide may agree to found a public school common to both provided they can obtain the approval of the "Deputation."† And besides, a *commune* is always at liberty to receive in its schools children belonging to other *communes*. Sometimes an agreement is made out between two *communes*, but often there is no definite agreement. When there is one, it must be submitted to the "Deputation" for approval. In order to close a school or to unite two schools into one, the approval of the Deputation must be obtained.

All children in a *commune* have the right to attend the public school; and, if there are more schools than one, they can choose between them. But their choice may be determined by the communal council, since it has power to divide the *commune* for school purposes into sections and to assign a school to each of them.

The *commune* is obliged to establish schools in distant villages which have a certain number of children of school age; but neither the number nor the distance are fixed by the law of 1889.‡

"School age" is not defined by the law of 1889. Communal councils are entrusted with the decision of this matter, but their action is subject to the approval of the "Deputation." As a general rule, children attend school in Holland between the ages of six and fourteen years. It may be held that the exclusion from the application of the law of 1889 of those schools which were attended only by children under six years of age, did in fact amount to a legal definition of the beginning of school age.

* See La Hollande, *Institutions Politiques*. p. 76. Larousse. Paris, 1899.

† In 1892 there were 39 schools founded and maintained by two or more *communes* in common.

‡ In the province of Overijssel, the distance has been fixed at one league (three miles), and the number of children at twenty; but it is provided that a request for a school must be made by the parents.

And perhaps a similar definition was implied for the age of leaving school by the provision that communal councils could prohibit the employment of children between *six* and *twelve* in trades not already covered by the Employment Act of May, 1889. But, in any case, this point has now only a historical importance, in view of the Law of 1900.

The regulations which determine the size and nature of the school buildings and apparatus are too minute to be given here. They are, moreover, contained not in the education laws but in Royal decrees; and the proper observance of them is to be enforced not by any educational authority but by the medical inspectors of the Government. These Public Health officials are required to act in concert with the school inspector, and must never refuse to give assistance when the school inspectors require it. The school inspector is required to inform the Health Officer when he believes a school-building to be insanitary.

*Adult Continuation Schools.** The *commune* is obliged, as far as possible, to establish schools for those who have "completed the course of ordinary primary instruction." This phrase, which occurs in Art. 17 of the law of 1889, means merely pupils of public schools, although it is not intended to exclude from the continuation schools those who have completed their primary education at schools other than public schools. On the other hand, no *commune* is obliged to establish a continuation school for the benefit of pupils who did not receive their primary education at the public school.

The course of study in continuation schools is merely a repetition of the subjects taught in Primary Schools (*herhalingsonderwijs*). But it may be extended by the addition to the regular course of study of those subjects which are merely optional in Primary Schools.

In 1892, 540 *communes* maintained Adult Continuation Schools.†

The "Deputation" may compel a *commune* to establish a Continuation School, but this is made conditional upon a sufficient number of pupils presenting themselves for admission to the proposed school.

Continuation Schools are, like Primary Schools, "neutral" in religion, under the Government inspection, etc.

Evening Schools.—These are quite distinct from the Continuation Schools and are attended as a rule by children who are at the same time attending the Primary School. An Evening School is thus as it were, an *annexe* of the Primary School. They were formerly very numerous, but in 1893 existed in 90 *communes* only. At that time 25,000 children attended them, of whom 2,536 were attending the Evening School only. Thus, over 22,000 children were in 1893 attending both an Evening School and a Primary School at the same time.

* French, *écoles d'adultes*. The Dutch term for the course of instruction in these schools is *herhalingsonderwijs* = *repetition-instruction*.

† In 1892, 16,786 persons attended the public, and 2,828 the private, Continuation Schools.

The regulation of private Primary Schools will be described in a separate section, since they are practically left free, except in so far as they desire to fulfil the conditions necessary for obtaining a Government grant. It should, however, be remembered that, whether they claim a grant or not, private schools must employ teachers who have qualifications determined by Government.

FINANCE.

I. — Public Primary Schools. — The expenses of public primary education are borne partly by the local, and partly by the central, educational authority—that is to say, by the *commune* and the State. To these sources must be added the income arising from school-fees, which not only affects the grant made by the *commune*, but also helps to determine the amount of grant to be made by the State to the *commune* in aid of its schools. Thus, no grant may be made by Government to a *commune* for the salaries of teachers in schools, where the fees charged amount to an average sum of 80 florins per annum per pupil. With this exception, the Government is not concerned to know what school fees are charged in public schools, except in so far as the law of 1889 prescribes that such fees must be charged in all schools to pupils who are not “indigent” or otherwise unable to pay them. The income from school fees may, therefore, be regarded as a source of communal revenue similar to the Government grants; and such part of the expenditure of the *commune* upon its schools as is not covered from these two sources, is met by local rates.

Article 44 of the law of 1889 enumerates the kinds of expenditure which have to be met by the *commune* under the following heads:—

- a.* Teachers' salaries.
- b.* Board allowances (*indemnités de logement*) paid to headmasters of schools, who do not receive a house free from the *commune*.
- c.* The subsidies and grants to be made for the training of teachers.
- d.* The expenses of maintaining schools for adults (called elsewhere in this Report, “Continuation Schools”).
- e.* The cost of building, maintaining, and purchasing land for school-houses or teachers' houses.
- f.* The cost of purchase and maintenance of school furniture, books, and other small objects necessary for primary school education.
- g.* The cost of lighting, warming, and cleaning the school-houses.
- h.* The cost of the local inspection and of the organisation of the meetings of the Inspectors.
- i.* The cost of school libraries, prizes, and diplomas.

Government grants are annual and may vary from year to

year. They are proportionate to the number of children in attendance at the schools in so far as they are designed to aid teachers' salaries, but are definitely fixed at one quarter of the total expenditure on new school premises, in so far as they are designed to aid the erection of school buildings.

a. State Grants for Teachers' Salaries.—Every teacher in charge of a public Primary School receives a grant varying according to the number of pupils in attendance on the following scale:—

	Florins
Schools with less than 91 pupils in attendance	- 250
Schools with from 91 to 199 pupils in attendance	- 300
Schools with from 200 to 309 pupils in attendance	400
Schools with from 310 to 419 pupils in attendance	500
Schools with more than 419 pupils in attendance	- 600

Every "assistant-teacher" or teacher assisting the teacher in charge, receives, *provided always an assistant-teacher be necessary in the school according to the legal proportion of teachers to pupils*, 150 florins if there are between 41 and 90 pupils, and 200 florins if there are more than 90 pupils.

But, if while holding the rank of head-teacher he is employed as an assistant-teacher, he receives 300 florins provided he is twenty-three years of age or over. In this case also, no grant is made unless it is legally necessary according to Art. 24 (3), for the assistant teacher in that school to possess the qualifications of a head-teacher.

b. Extraordinary State Grants for Teachers' Salaries.—It was necessary to provide by legislation against the injustice that might otherwise have been done to certain *communes* which had appointed, in the interests of primary education, a larger number of teachers than was actually required and fixed by the new law. It would have been unjust to withhold the grants for these teachers on the ground that they were not required by law, since their appointment had been made before the legal proportion of teachers to pupils was fixed. Partly in order to avoid this, and partly also in order that the *communes* should not be obliged, when a school lost a certain number of pupils, either to dismiss a teacher or to support him without assistance from Government, the legislation of 1900 provided that, when the number of teachers was above the required minimum, extraordinary grants should be made to the *communes*. The scale of these "extraordinary grants" is as follows:—150 florins for *one* such extra teacher in a school with less than 90 pupils; 200 florins for *one* such extra teacher in a school with from 91 to 309 pupils; and 200 florins each to *two* such extra teachers in a school with more than 309 pupils.

As has already been said, the State makes grants for one whole year. If a vacancy should occur in the school staff during the year the grant would only be paid for that portion of the year

during which the position was filled. It has also been mentioned that when the school fees amount to an average of 80 florins a year for every pupil, no grant whatever in aid of teachers' salaries is made by the State.

c. State Grants for Building or Buying School Houses.—

It is well to take a glance back at the legislation of 1878 in order to understand the principles which govern this side of the financial aid given to education by the Dutch Government. The financial clauses of the law of 1878 had not been repealed until July 1884, and, in the interval, the State had indemnified the *communes* to the amount of 30 per cent. on their total annual expenditure. This of course included expenditure on "building and maintenance." When in 1889 the financial relations of the local and central authority were once more readjusted, it was considered more economical and otherwise more satisfactory for the State to continue to share the expense involved in the creation of new schools rather than to increase its grants in aid of teachers' salaries. Those who have read the historical account of Dutch education given above will remember that the arrangement under the law of 1878, by which the State contributed 30 per cent. of the total annual expenses, had so enormously increased the Government's educational budget that it was repealed after four years of operation. Yet we find six years later that the Government undertakes to defray an expenditure which is equally large to begin with, and has possibilities of expansion to which it would be difficult to assign a conjectural limit. In 1884 the State refused any longer to contribute 30 per cent. of the total cost of public education; in 1890 it begins once more to grant 25 per cent. of the expenditure on school-buildings, and charges itself besides with grants in aid of salaries, which, in the total, must certainly have amounted from the very beginning to quite 10 per cent. of the total amount expended from all sources on the payment of teachers. Thus the share of the State is now 25 per cent. of the capital outlay on building and land purchase, 25 per cent. of the cost of maintaining school buildings, rent, &c. (income), and between 6 and 10 per cent. of the cost of teachers' salaries. The proportion of the total expenditure on public education which the State now (1899) bears cannot be estimated exactly; but it is evident that it must at the least be equal to 30 per cent., and that the law of 1889 renewed the financial provision enacted in 1878 and repealed in 1884.

It was said that the Government considered it more economical to continue its share in the cost of school buildings than to increase its share in the expenditure upon teachers' salaries. The advantage was twofold. In the first place, to disturb the existing arrangement involved the loss of the investment in school buildings already made, the abandonment of the property in which a share had been obtained by capital outlay; and in the second place, after paying heavily towards the building of new schools, the Government would have been charging itself afresh with the

salaries of the teachers necessitated by the building of those new schools. But these considerations of economy might have been disregarded if the Government had had no other reasons for the arrangement. Its most real advantage was that it would enable the Government to bring far more effective pressure to bear upon *communes* to erect schools required in the public interest than it could have done if the expense of their erection had fallen upon the *communes* alone.

The Government, then, by the law of 1889, meets one quarter of the expenditure on school buildings, maintenance, and land. But this is only done when the expense actually falls upon the *commune*. Thus, if the *commune* raised money by the sale of old school sites or old school buildings, towards the expense of erecting new buildings, or if it received donations for this object, the amount so raised would be deducted from the total, and the State would pay 25 per cent. of the total as reduced by those deductions.

Finally, two changes should have been noticed. The law of 1889 abolished the Government contribution towards the furniture and apparatus of public Primary Schools. It abolished also the contribution previously made by the Provincial administrations. Communal rates, Government grants, and school fees are now the sole sources out of which public primary education is provided.

d. Method of Payment of Government Grants.—Every year in February the "Deputations" send to the Minister of the Interior a statement detailing:—

a. The number of children who attended each of the schools in their province on January 15 of that year.

b. The subjects taught in each of these schools.

c. The total of the school fees paid by the pupils of each of these schools.

d. The number of teachers required by the legal proportion of teachers to pupils in each of these schools.

e. The number of teachers employed in each of these schools over and above the minimum of teachers required by law.

f. The grants to which each of these schools is entitled by reason of the above particulars.

It should not, however, be supposed that grants are paid to schools separately. The amounts due to all the schools under one communal authority are paid in total to that *commune*.

It will be observed that the particulars under *a.* and *d.* in the above form of statement enable the central Department to satisfy itself as to the proportion of teachers to pupils in each school, while *e.* gives the number of extra teachers employed, and *c.* enables the Department to judge whether any grant is to be made at all in aid of teachers' salaries (since where the total amount of school fees received divided by the total number of pupils shows the average school fees paid by each pupil to be as much as 80 florins, the State is not obliged, nor entitled, to

contribute towards teachers' salaries). Lastly, *b.* informs the Government whether the law is or is not observed in the school.

Those familiar with similar provisions in other countries will notice that the conditions to be fulfilled by a school claiming a grant are usually more elaborate. In Holland they are reduced to two: the subjects required by law must be taught in the school and a certain ratio of teachers to pupils must be preserved. It is true that there are restrictions as to the nature of the school buildings; but no degrees are recognised in this matter. Either the buildings are condemned by the medical officers (*inspecteurs du contrôle médical*), in which case the school is closed until new buildings are erected or alterations are made; or else the fact that the school continues is taken as proof of the adequacy of the building from all hygienic points of view, situation, size, ventilation, sanitation, furniture, accommodation, etc. Nothing is said in the recommendation for grants sent by the "Deputation" of the method of instruction employed by the teachers, of their qualifications, of the results of their teaching, the condition of the pupils, the educational requirements of the district, or the needs of the school.

In practice this system works admirably, and the reasons are not far to seek. The Government, after nearly a century of experience, can rely upon its inspectors to administer the system locally, upon the teachers to perform their duties properly, and upon the *communes* properly to use the support given them. The qualifications of inspectors are determined by Government before their appointment; all teachers must satisfy the Government by examination of their fitness for practical teaching; and the public interest in, and respect for, education are so strong that the local authority can safely be entrusted with a large measure of freedom. The result is that in Holland there is little need of pressure to be exercised upon the backward school, and none of that common *facilis descensus Averni* of the necessitous school whose Government grant is elsewhere reduced in proportion to its need of money.

The payment of grants is made quarterly and is not retrospective, *i.e.*, grants are paid to meet the coming quarter's expenses, not to cover the expenses of the expired quarter. Grants are claimed on behalf of the *communes* by the "Deputations" in February. In the following January a second statement is sent to the Minister of the Interior to enable him to judge how far the grants paid to the school have been actually due to it. If there be a difference between what has been paid and what was due, this is carried to the credit or debit side of the *commune's* accounts; and accordingly affects one way or the other the amount of grant to be paid for the coming year.

The grant of 25 per cent. in aid of school buildings is not, like the grant for teachers' salaries, paid in advance. This is partly because it is seldom certain what a building or a repair will cost until it is finished—a matter of experience not confined to

public bodies.—and partly because the State, as already mentioned must first deduct from the total the amount realised by the *commune* on its existing property before the Government share of one quarter is ascertained.

A Royal Decree promulgated in 1890 enabled the Government to pay grants in aid of teachers' salaries in advance.

Finally, it should be noted, in connection with the degree of confidence placed by Government in the local authorities, that the contribution of one quarter of the expenditure upon new buildings or new schools, does not confer upon the Government any right to question either the necessity or the utility of the new building or school to which it contributes so much.

c. School Fees. Article 46 of the law of 1899, reads as follows:—

"In order to meet the expenses which fall upon it, the *commune* is obliged to exact the payment of a school fee that shall not be less than 20 cents a month for each child in attendance at the school. Exception is made in favour of the 'indigent,' or of those who, while not indigent, are unable to pay a school fee. Persons in straitened circumstances can be partially exempted."*

The law fixes only the minimum of school fees†; it does not limit the freedom of a *commune* by imposing a maximum. The only restrictions are, that the amount so raised should go towards diminishing the communal expenditure for education, and so relieve the communal rates, and that the school fees should not be in any way a source of profit for the *commune*.

The rich do not pay for the education of the poor in the same *commune*. The *commune* can always make the school fee proportionate to the circumstances of the parents; but it can never exact even from the richest parent a school-fee which amounts in the year to a larger sum than the education of his child or children actually costs the *commune*. What that amount is, is of course determined by the average expenditure of the school per pupil.

If two or more children of the same family attend the same public school at the same time, the *commune* can reduce the scale of fee to be paid in respect of each child. This power is, as a general rule, fully exercised.

If there is more than one public school in the *commune* one or more of them can be specially designated as those to be attended by children entitled to gratuitous instruction, provided always that the education given in them be on an equality from all points of view with that given by the schools in which fees must be paid.

To be certified as "indigent" by the Burgomaster and Aldermen

* "*Les personnes peu aisées peuvent en être exemptées pour partie.*"

† For the explanation of this and of the compulsory obligation to charge school fees, readers are referred to the history of Dutch primary education given above.

of the *commune* confers in itself the right to attend school free of charge. The "indigent" are certified by these communal officials independently of the communal council (*i.e.*, the local authority for schools), who cannot even dispute the certification. The Burgomaster and Aldermen also fix the reduction in the school fee to be granted to persons in straitened circumstances. The "indigent," as well as these others, are not defined by a fixed scale of income, but are mentioned by name and classified according to the judgment of the communal officials. It was found that any system by which the inhabitants of a commune might for this purpose be placed in certain categories according to their income would lead to numerous abuses.

Children who are received into a home for orphans are admitted to school without fees and irrespective of their resources.

If the *commune* admits to its schools children belonging to other *communes* it cannot alter its scale of school fees to the advantage or disadvantage of these children.

The *commune* may order that payment of school fees shall be made in advance and can close the school to those children who do not comply with such an order. It can further arrange that the teacher himself shall collect the fees, provided he accounts for them to the communal treasurer.

The levy of school fees and the determination of their amount are fixed according to the rules established for ordinary communal rates; and the school fee itself is regarded as similar to a communal rate. The assessment roll, in cases where the school fee varies according to the circumstances of the parents, must be publicly exhibited.

If a *commune* exacts from the pupils in attendance at its public schools either too high or too low a school fee, the Minister of the Interior may use his influence to diminish or to increase it. But his power goes no further; provided always that the school fee amounts to the minimum of 20 cents. per child.

School fees are, as a general rule, not high. They brought in, in 1892, 1,505,759 florins (making an average of about 3.22 florins per pupil *per annum*), and, in 1898, 1,743,711.

Special Grants.—Sometimes the expenditure which the *commune* cannot meet with its resources from school fees, local rates, and ordinary Government grants, is met by special Government grants. These are, however, only temporary, and can be apportioned by the Government according to its pleasure.

Special grants have in recent years amounted to a very large item in the Government expenditure on public primary education. Some *communes* receive in the form of special grants more than 50 per cent. of their total expenditure.

II.—Private Primary Schools. Government grants equal to those apportioned to public Primary Schools are given also to private Primary Schools which fulfil, besides some of the conditions imposed upon public schools, certain other conditions

peculiar to schools managed or owned by private associations or individuals.

Before these special conditions are described, the financial provisions of the law of 1878 must once more be recalled and the new position of private denominational schools under the law of 1889 must be briefly indicated.

The law of 1878 had permitted *communes* to give grants to private schools in which the instruction comprised all the obligatory subjects enumerated for Primary Schools with modern languages and mathematics besides. Moreover, in order to obtain such a communal grant, the private school had to abandon its denominational connexion if it had one. Lastly, until this grievous condition was removed after two years' operation by the amendment of 1882, private schools that claimed communal grants had to satisfy the conditions imposed upon public Primary Schools in regard to the rules for hygiene, size, accommodation, etc.

It naturally followed that very few private schools were at once willing and able to satisfy these conditions. Few were willing to renounce their denominational character; and, of those few, not all were able to teach all the subjects required of them; and not many could satisfy the hygienic conditions imposed. In 1889 only 57 private schools were in receipt of these communal grants.

Nothing more than a retrospective sanction was given by the law of 1889 to these provisions of the law of 1878. The *communes* were allowed to continue their grants to schools which were already in receipt of them; provided always, that the conditions attaching to them were in no way altered and that the number of communal grants to private schools was not increased.

Consequently, the number of schools receiving communal grants has steadily diminished. In 1892 there were only 36 of these "neutral" private schools receiving communal grants, and by 1898 there were only 18 left, while of these 18 one withdrew its claim.

The law of 1889 was principally distinguished by its liberality towards denominational schools. But, even so, it cannot fairly be said that they are treated on the same footing as the public Primary Schools. There are no *special grants* made to private schools who cannot meet their annual expenditure, nor does the State contribute anything towards the cost of new sites, new buildings, new schools, or extensions, improvements and repairs of existing schools. It will be remembered that the Government contributes one quarter of the expenditure involved in work of this nature in the case of public Primary Schools. The official plea justifying the refusal of this assistance to the private denominational school was ingenious but hardly convincing. It was urged that such special grants would involve the enforcement upon the private schools of those hygienic rules to which they had so strongly objected under the *régime* that lasted from 1880 to 1882; it would involve them in fresh ex-

penditure and would still further restrict their freedom. The exception, it was urged, was not only in the interests, but according to the expressed preference, of the denominational schools.

But it is the facts not the merits of the case that here concern us. By a Royal Decree of February 19, 1890, the following procedure was determined for private schools claiming a Government grant:—

Every year on the first of January they must send their claim to the "Deputation" of the province. In accordance with the statement they submit, the "Deputation" decides whether they are entitled to a grant, and, if so, what the amount of the grant shall be.

Accordingly, the annual statement of claim gives the following particulars:—

(1.) The name of the association possessing the rights of "civil personality" * to which the school belongs.

(2.) A list of the subjects taught in the school.

(3.) The number of children who attended the school on January 15 of the previous year (or, if the school was not in existence at that date, two months after the date of the opening of the school).

(4.) The total amount received in school fees and the average school fee per pupil.

(5.) The number of teachers, their names, ages, and certificates of qualification.

(6.) The claim must conclude with a declaration that the school is not managed for pecuniary profit.

The decision of the "Deputation" is made before May 1 of each year after a careful examination of the claim and of the reports sent to it by the inspectors of the district. The decision is communicated to the Minister of the Interior and specifies the amount of grant to which the school in question is entitled; it is also communicated to the Inspector-General of the division, and to the managing body of the school.

The decision of the "Deputation" does not take into account the quality of the education given, but only the *general conditions that govern the application of Government grants to private denominational schools.*

These conditions must now be summarised.

(1.) Private schools must be under the direction of an institution or of an association which possesses the "civil personality." It is unnecessary here to explain this technical term in detail.

* Under the Act of 1855, see next page.

The law which enacted it was passed in 1855. All associations, whatever be their nature, can be recognised as "civil personalities," unless they are "contrary to public order," i.e., designed to provoke disobedience to the law, or calculated to corrupt the public morals or hinder the exercise of the rights of private individuals. The recognition of such bodies is not granted until their statutes and by-laws have been approved, and these by-laws, etc., must specify the object, the foundation, and the sphere of activity of the institution or association. The recognition is not difficult to obtain, and its refusal is rare. But it acts in some sort as a safeguard against anti-social associations.

It is not necessary for the association actually to own the school buildings. It is enough that the school be under their management.

(2.) All private schools receiving Government grants must be conducted by a teacher possessing the rank of head teacher (*instituteur en chef*), and at least twenty-three years of age. This condition is common to both public and private schools. But the head master of a private subsidised school cannot, like the head master of a private school not aided by Government, conduct more than one school at a time without thereby depriving all the schools of which he is in charge of the grants otherwise due to them. There must be a different head master at the head of each private aided school. He must, further, be assisted by assistant teachers in the proportion of teachers to pupils, fixed for public schools by Article 24 of the law.

An exception to Article 24, Clause 3, was made in favour of private schools. The assistant teachers in private schools need only possess the certificate of "ordinary teacher," whereas in public schools, whenever there are more than three assistant teachers, one of these must have the rank of head teacher, and when there are more than six assistant teachers, two must have this rank.

The rule about vacancies in the staff was originally the same for both public and private schools; a vacancy could not continue, in the case of a head master, for more than six, nor in the case of other teachers for more than four, months. In practice this restriction was found to press hardly upon the private schools, and accordingly it was amended in 1895 on the motion of M. de Savornin Lohman. The law of 13 September, 1895, provided that the condition need not be fulfilled (i.e., that grants could be given although this condition had not been fulfilled) in the case of private schools, provided they could satisfy the Government, through the inspector of the *arrondissement*, that they had been unable to secure a competent teacher within the period specified in spite of their offer of adequate salary (*traitement convenable*).*

* See De Loos, "Organisation de l'Enseignement Primaire, &c.," pp. 23, 24

(3.) The instruction given in a private school claiming a Government grant must comprise all the subjects defined as "obligatory" in Article 2 of the law. In other words, their course of studies must be the same as that in public schools. Private schools are, however, excused from giving "manual training" if they can show that the children in attendance have other opportunities of obtaining instruction in this subject.* Those subjects which are defined as the "optional" branches of primary education in Article 2 (*branches facultatives*) may also be taught in private schools, but there is no obligation to teach any of them.

Private schools are left entirely to themselves in the matter of religious instruction. No obstacles can be put in their way in this matter, and the inspectors are not allowed to concern themselves with it.

(4.) The instruction in obligatory subjects must be given during at least 18 hours in every week, and not more than 2 out of the 18 hours may be devoted to manual training. Of course in schools where instruction is given for more than 18 hours per week more than 2 hours per week can be devoted to manual training.

The managers of the school are entirely free so far as the dates and duration of the holidays are concerned.

(5.) All subsidised schools must have a code of rules and regulations, in which must be specified the subjects taught in the school, with the hours of each day that are to be devoted to each. These rules are submitted to the *arrondissement* inspector every year before the opening of the school. The inspector examines it solely from the point of view of its legal correctness; he has no right to make suggestions in regard to the curriculum or anything else.

Private schools claiming grants must satisfy these five conditions.

There are three classes of private schools which have no claim to Government grants even though they should satisfy the five conditions already described.

These are:—

(1.) Schools in which there are not more than 25 pupils over six years of age.

* M. Moyersoen (*Op. cit.*, p. 112) gives an interesting illustration of the relations between the *commune* and the private school: "*Si une administration communale établissait des écoles spéciales pour les travaux manuels, elle ne pourrait y admettre les enfants des écoles libres de façon à décharger celles-ci de l'obligation de les faire enseigner; car cette admission serait considérée comme un subside indirect donné par la commune à ces écoles.*"

(2.) Schools in which the school fees reach an average of 80 florins per year per pupil.

(3.) Schools established or managed for pecuniary profit.

The exclusion of Class 1. from Government grants is designed to exclude infant schools (*écoles gardiennes*), which might otherwise attempt to pass for primary schools. It is supposed that those schools which belong to Class 2 will be quite able to do without Government support. Class 3 is less difficult to define than one would suppose. It is the "Deputation" of the province that decides whether a school is conducted for profit. On the other hand, the burden of proof that the school is *not* conducted for profit is not imposed by law on the managers. The scale of the school fees and the circumstances in which the school was established are usually the principal grounds of the "Deputation's" decision.

The following figures give some idea of the situation of the private schools whether subsidised or not at the dates 1892, 1893, and 1898 respectively.

TABLE I.

	1892.		1898.		1893.
Private schools (undenominational) still receiving communal grants under the law of 1878	-	36	-	18	34
Private denominational schools receiving Government grants under the law of 1889	-	1,022	-	1,174	1,047
Private denominational schools not receiving such Government grants	-	273	-	256	270

TABLE II.

—		1892.		1898.	1893.
Denominational Private Schools	—	1,295	—	1,430	1,317
Roman Catholic - - -	575	—	648	—	544
Protestant - - - -	685	—	751	—	698
Jewish - - - - -	11	—	10	—	11
Other Denominations - -	24	—	21	—	26
Total - -	—	1,295	—	1,430	1,317
Undenominational Private schools, <i>i.e.</i> , schools originally denominational that, having severed their religious connexion in order to obtain communal grants under the law of 1878, remain undenominational because they continue to accept such grants - -	—	36	—	18	34
Grand Total of Private Schools -	—	1,331	—	1,448	1,351

TABLE III

Population (according to communal returns) on December 31, 1898.

Males - - - - -	2,513,267.
Females - - - - -	2,561,365.
Total - -	<u>5,074,632.</u>

TABLE IV.

—	1892.		1898.		1893.
Total Number of Public Schools - - - -	2,993	-	3,096	-	3,022
Total Number of Private Schools - - - -	1,331	-	1,448	-	1,351
Grand Total of Primary Schools - - - -	-	4,324	-	4,544	4,373

TABLE V.

	1892.	1898.	1893.
Boys attending <i>Private Schools</i> , whether denominational or not, both subsidised and non-subsidised	88,615	99,268	91,033
Girls attending <i>Private Schools</i> ditto - - -	111,748	125,093	114,345
Pupils attending <i>Private Schools</i> , ditto - - -	-	200,363	205,378
Boys attending <i>Public Schools</i> - - -	253,799	275,310	257,840
Girls attending <i>Public Schools</i> - - -	204,940	219,744	209,070
Pupils attending <i>Public Schools</i> - - -	-	458,739	466,910
Grand Total of pupils receiving Primary Education whether in Public or Private Schools - - -	-	659,102	672,288
Grand Total of boys -	342,414	374,578	348,873
Grand Total of girls -	316,688	344,837	323,415

TABLE VI.

The attendance figures for 1899 were :—

Public Schools :

Boys - - - - -	280,152
Girls - - - - -	223,579
	<u>503,731</u>

Private Schools :

Boys - - - - -	99,470
Girls - - - - -	127,487
	<u>226,957</u>

Grand Total of Pupils - - - 730,688

Grand Total of Boys - - - 379,622

Grand Total of Girls - - - 351,066

RELIGIOUS INSTRUCTION.

The text of the law of 1889 is as follows:—

“Primary education, while imparting those branches of knowledge which are necessary or useful, ought to develop the intellectual faculties of the children and prepare them for the practice of all the virtues, whether Christian or social.

“The teacher should carefully abstain from teaching or doing, or allowing to be done, anything whatsoever that may be contrary to the religious opinions of those who profess some form of worship other than his own.”

It will be convenient to examine this question first from the point of view of the teacher. His obligation to preserve “neutrality” in religion lasts only during the regular hours of school. Outside, he is as free as anyone else. He can then openly profess his religious opinions and may even teach a dogmatic creed to any audience. During school hours he may always speak of God, or the Divine Providence, and of the immortality of the soul. He cannot teach the Divinity of Christ if there are Jewish children in the school. He cannot bring any emblems of religion into the class-room. He can say a prayer at the beginning and at the end of the school day; but the prayer must be so framed as to be acceptable to all the shades of religious conviction represented in the school. As a matter of fact, the prayer at the beginning or end of the school day is now very seldom used. The teacher may not read aloud passages from the Bible in school, although he may give a narrative of Biblical facts.

Such is the negative side of his attitude on religious questions; but it has its positive side as well. A member of the Second Chamber declared during the debates of 1889 that the real object of the State was not to realise any *doctrinaire* notion of absolute neutrality, but rather to secure the observance of a neutrality relative to the religious convictions actually represented in the particular school. It is not expected that the teacher in school is to abstract himself from the atmosphere in which he lives out of school hours. It is not expected that he should respect all possible religious opinions, including those which have no adherents either in the school or in its neighbourhood.

Naturally the system of neutrality, for all its rigid appearance in the formulas of an Act, admits of a great deal of variety in its local application. Thus, in Limbourg and Brabant, where nearly all the inhabitants are of the same religious faith, the teacher enjoys considerably more freedom than he would elsewhere. Where the religious opinions of the inhabitants are really divided, the law is enforced with all severity.

But even in districts such as those just mentioned, where

Roman Catholicism is practically the only faith, no members of the religious orders, whether Brother or Nun, could be allowed to teach in the habit of an order; and this amounts in practice to excluding all "religious" from the ranks of professional public school teachers. On the other hand, the teaching of religion is entrusted everywhere to the ministers of the various communions, and the time-table of every public school sets apart a certain number of hours during which the school houses are at the disposal of the clergy under certain conditions.

Varying use is made of this opportunity. Sometimes a whole holiday is given to the children once a week, and during that day the school-house is at the disposal of the ministers. Sometimes an afternoon only is thus given up, perhaps Friday afternoon, for this is a usual day for a half-holiday. Or the school invites the clergyman to come and give religious teaching before or after school; and this is perhaps the most common practice, because it has been in use ever since 1857.

There is one practice, not very common perhaps but still well known, which seems to be entirely contrary to the spirit of the law. Religious instruction is sometimes given during the ordinary school hours, and the children of a different faith or of no particular faith leave the schoolroom for a time and play about until the religious lesson is over. This procedure would be quite likely to accentuate the religious distinctions and barriers which the legislators of 1889 (and indeed of 1806 and 1857) desired to minimise in the public schools. In any case it is contrary both to the letter* and to the spirit of the law of 1889.

General leave is not given to the pupils of a public school upon religious festivals, unless these are observed in common by all the principal Christian communions. Thus, school is held as usual on the feast of the Purification of the Blessed Virgin, although this is a feast of obligation for the Roman Catholics. But the Roman Catholic parents of the *commune* can always apply for special leave for their children in cases such as this, and such special leave is not often refused.

The Dutch people have never inscribed among the obligatory subjects of instruction for Primary Schools any such subjects as "morality" or "civics." Yet their law obliges the teacher to prepare his pupils for the exercise of all virtues, Christian and social. It is well understood that this preparation is to be given more by the teacher's example than by his precept, more by the tone of the school than by direct teaching.

It is difficult to give any figures in regard to the teaching of religion, as the usual official reports do not, it is supposed, contain such details. M. Moyersoen's figures for 1892 must therefore suffice.

1892. Religious instruction was given in 786 out of 2,993 public schools distributed among 446 *communes*.

* *A cette fin les locaux sont mis à leur disposition en dehors des heures scolaires régulières.*

TEACHERS.

Among the features of the Dutch system of primary education that have been the least changed by the successive enactments of the Legislature, figure all the arrangements for the supply, the training, the appointment, and the payment of teachers. The favourable judgments passed upon this system by competent observers in 1811, 1836, and 1861 are equally true of it as it now is; and accordingly, those who wish to form an estimate of its value may be referred to the historical portion of this essay where the opinions of Cuvier, Cousin, and Matthew Arnold are reported or quoted. Here the facts only will be given; and nothing more than a concise statement of them seems desirable.

Both sexes attend together the Primary Schools of Holland, or, to use current phraseology, the schools are "mixed," "co-education" is the general rule. It is obvious therefore that the supply of teachers must correspond to this central fact.

Usually the teacher at the head of a school is a man; although mixed schools under a mistress are not unknown. Only about one quarter of the whole number of primary teachers are women. Article 25 of the law of 1889 lays down a general principle in regard to the distribution of men and women teachers when both are employed in the same school; but it does not make this distribution obligatory nor is there any clause compelling schools under certain conditions to employ a woman teacher.

Article 25 is as follows:—

"When a school comprises several classes, the instruction of the lower classes should be entrusted by preference to women teachers, and the instruction of the higher classes to men teachers, except in schools exclusively reserved for girls."

All teachers undergo some kind of training, and nearly all pass through a period of probation. The training is carried out partly by normal schools supported by Government or by private associations, partly by courses of normal instruction (*Rijksnormallessen*) paid for by Government, partly by the pupil-teacher system which England originally borrowed from Holland.

On the whole, the supply of teachers is just equal to the demand. The training is admittedly thorough, though some critics allege that it is not practical enough, and that a clearer distinction should be made between the training suitable for teachers in towns, and that for rural school teachers. Adequate provision, however, seems to be made for manual training and horticultural instruction in the training colleges, and it must not be forgotten that as many teachers pass from rural to urban schools, their professional preparation cannot be wholly differentiated. Moreover, town children specially need good teaching in natural history.

No person can give primary instruction without two certificates, a certificate of moral character and a certificate of qualification.

The first is given by the communal authorities, the second is obtained by examination. Certificates of qualification are of two grades, those of "head teacher" and "ordinary teacher."

But, before going any further, the exceptions to this general rule must be noted. A certificate is not necessary for those who wish to teach the children of one family only, *i.e.*, to private tutors or governesses. Nor is one required of a professional teacher who gives his services for nothing. These are as a rule charitable people, often ladies, who undertake the instruction of children living a long way from any school. But even they must obtain an authorisation from the Queen. Those women, again, who manage evening schools for domestic servants or women workers can obtain the same authorisation. Finally all persons who hold the certificates necessary for teaching in the Intermediate Schools, or who have degrees confirming the right to teach generally (Doctor of Letters, Sciences, etc.), may teach in Primary Schools.

"Ordinary teachers," or teachers possessing the second grade of qualification (*onderwijzer* = teacher) can teach the first eight of the obligatory branches of study for Primary Schools enumerated above (p. 350). A special certificate is, however, required of those who wish to teach gymnastic exercises or manual work (10 and 11, gymnastics and "*ouvrages manuels d'utilité*"). Teachers who possess the rank of head teacher (*hoofdonderwijzers* or *hoofden van scholen* = head teachers, heads of schools) can teach, besides the first eight obligatory subjects, the elements of universal history and drawing.

A certificate of qualification as "ordinary teacher" is obtained under the following conditions:—

1. The candidate must be eighteen years of age.
2. He must apply to the district-inspector for permission to enter at an examination which is held at least once a year in every province.
3. He must accompany his application with a birth certificate and a certificate of character obtained from the Burgomaster or other trustworthy person in his *commune*.
4. He must pay a fee of five florins.
5. He must satisfy the examiners in the following subjects:—
 - a. Reading and writing.
 - b. Analysis of sentences, orthography, elements of the Dutch language.
 - c. Faculty to express his thought with facility and exactitude in speech and on paper.
 - d. First exercises in drawing.
 - e. Arithmetic, including addition, subtraction, &c., of vulgar and decimal fractions, the theory of proportion, and the Dutch system of weights and measures.
 - f. Elementary outlines of geography, particularly of the geography of Holland and of its foreign possessions.
 - g. The principal events of the national history.

- h. The elements of natural history.
- i. The theory of singing.
- j. The principles of pedagogy and education.

Those who already possess the certificate of "ordinary teacher" can again enter for an examination in one or more of the optional subjects which can be taught in Primary Schools, that is to say, in the elements of French, German, or English, in mathematics, agriculture, and gymnastics. A fee of five florins must be paid for examination in any one of these subjects.

Those who possess no certificate at all can be admitted to special examinations in gymnastics, drawing, and manual work for girls, if they pay a fee of two florins for examination in each subject.

To obtain the certificate of qualification as "head teacher" certain additional conditions have to be fulfilled. These conditions are:—

- (1.) A birth certificate.
- (2.) A certificate of moral character.

(3.) An attestation which must be signed by the head of the school from which the candidate comes to the effect that he has, during at least two years, given primary instruction as an "ordinary teacher," either—*a*, in a private school; or, *b*, in a public school; or *c*, has taught in one or the other of these classes of Primary Schools as a pupil-teacher holding an "ordinary teacher's" certificate; or, *d*, has given primary instruction in a school for the deaf and dumb, the blind, the mentally defective, or stammerers.

(4.) In cases where the candidate has not been engaged during two years as a teacher in a Primary School he may replace the attestation (3) by a certificate from the director of a Normal School to the effect that he has followed the course of normal instruction in that school during two years since he obtained the rank of ordinary teacher.

- (5.) He must pay a fee of 10 florins.

Commissions are appointed in each province for awarding the certificate of "ordinary teacher." The commissions for awarding the certificate of "head teacher" are appointed annually by the Minister of the Interior and vary in number according to his discretion. Members of these "commissions" have their expenses paid.

All teachers must pass the State certificate examinations. There are no denominational commissions for giving certificates to teachers from private denominational schools or Normal Schools. The proposal to constitute such denominational commissions has for some years formed part of the Clerical and Anti-Revolutionary platform of educational reform.*

* See Moyersoen, *op. cit.* p. 43.

There are very few complaints against the system which makes a certificate obligatory.

Any teacher can be deprived of his qualification to teach if he has been convicted in a court of law of certain specified offences.

Foreigners who wish to teach in a Dutch Primary School must obtain an authorisation from the Crown, besides the ordinary certificates of qualification and of moral character.

Article 24, Clause 3, determines what shall be the proportion of teachers to pupils in public Primary Schools. In the first place, it is elsewhere provided that no school can, without the express authority of the Crown, contain more than 600 pupils. When a school has more than forty, and less than ninety-one pupils in attendance, the head teacher in charge of the school must be assisted by *one* "ordinary teacher"; when there are between 91 and 144 pupils he must be assisted by *two* ordinary teachers; and if there are more than 144 pupils he must have one additional teacher under him for every 55 pupils over 144. But this legal minimum can always be exceeded at the will of the *commune* should the interests of primary education in the district render it desirable.

When there are more than three assistant teachers, at least one of them must be twenty-three years of age, and possess the certificate of "head teacher." When there are more than seven assistant teachers, two must fulfil these conditions. Teachers who give instruction only in the branches which require a special certificate, or in the optional branches only, are not reckoned in this calculation.* Pupil-teachers are not recognised for the purpose of school staff.

* The following scale is borrowed from M. Moyersoen's book, p. 82 :—

Number of Pupils.	Head Teachers in charge.	Assistant Teachers.		Total of Teachers.
		Teachers aged 23 and holding Head Teacher's Certificate.	Ordinary Teachers.	
Below 41 - - -	1	—	—	1
" 91 - - -	1	—	1	2
" 145 - - -	1	—	2	3
" 200 - - -	1	—	3	4
" 255 - - -	1	1	3	5
" 310 - - -	1	1	4	6
" 475 - - -	1	2	6	9

The teacher in charge of the school fixes the hours for the classes, the intervals between classes, and the dates of opening and closing school. The school year, as a rule, begins about the middle of August or beginning of September, that is, after the long holidays. The teacher in charge is responsible for the internal management of the school, the discipline of the pupils, &c., but his regulations for the school are subject to the approval of the "College of the Burgomaster and Aldermen," and of the district inspector. Subject to this, he can choose the books to be used in the school, and usually in *communes* where there is more than one public Primary School the head masters make a common arrangement as to this.

When a *commune* refuses or neglects to appoint the proper number of teachers, the teacher in charge or the inhabitants of the *commune* may complain to the "Deputation," which may refuse its sanction to the communal budget. As long as a *commune* does not fulfil the conditions of the law it cannot obtain a Government subsidy.

The calculation of the number of pupils in attendance is made on the basis of the number in attendance on the 15th January in each year. For the purpose of determining the average amount of school fee paid per pupil, as well as the proportion of teachers to pupils, this arrangement has obvious disadvantages. On the other hand, the number in attendance does not affect the Government grant. It is perhaps an advantage that there should be no elaborate marking and testing of registers to interfere with the regular work of the school.

Teachers of public Primary Schools under communal authority are nominated by the communal council. In the case of a teacher to be placed in charge of a school, the nomination is made from a list of three applicants, which is prepared by the Aldermen in consultation with the district inspector. Formerly it was obligatory to hold some form of examination in order to ascertain the comparative attainments of the candidates. But this system led to so many complaints and appeals, that the Minister of the Interior proposed some years ago to abolish it. This he was not permitted to do; and a compromise was made which is still in force, namely, that, when the Aldermen and the inspector of the district cannot agree on the merits of the applicants, an examination must be held. If the candidates are very numerous, the Aldermen and the district inspector may choose six, who alone shall compete, and, if they cannot agree upon these six, they must authorise the whole number to compete.

When an examination is held for the appointment of a teacher to the charge of a school, the district inspector prepares a select list of at least three candidates, and this is sent to the communal council, with a note of his opinion as to their merits. But if the communal council is not inclined to appoint any one of those on the list (to which its choice among the candidates is limited), it may choose a teacher in charge of some other public school in

the *commune*, with the district inspector's consent. For such changes the concurrence of the teacher is not required.

"Ordinary teachers" are nominated by the communal council from a list of three candidates prepared by the College of Aldermen in consultation with the *arrondissement* inspector, and after hearing the views of the head teacher in charge of the school concerned.

Teachers, whether they be head teachers in charge or assistant teachers of "head" or "ordinary teacher's" rank, are appointed by the Minister of the Interior to those schools which are under the direct control of the State, *i.e.*, the Practice or "Model" Schools attached to the Government Normal Schools.

The communal council has also power to dismiss a teacher on the recommendation of the College of Aldermen or the district inspector if he is in charge of a school. If he is an "ordinary" assistant teacher, the recommendation must come from the *arrondissement* inspector. The "Deputation" can also revoke the appointment of a teacher, suspend him from his functions, and even deprive him of them.

When a teacher is suspended, dismissed, absent, or prevented from teaching for the time being, the College of Aldermen must see that his place is provisionally filled. The *arrondissement* inspector is consulted in such cases. The *commune* always pays the salary of such a provisional teacher, though if the regular teacher is only taking a long holiday he must pay the salary of his substitute.

Salaries.—The communal council fixes the salary to be paid to the teachers, but a minimum is determined by law, and the approval of the "Deputation" must always be obtained.

The *minimum* established by the law of 1889 is as follows:—

Head teacher possessing head teacher's certificate, and actually in charge of a school—at least 700 florins.

Teacher possessing head teacher's certificate engaged as ordinary teacher—at least 600 florins.

Ordinary teacher—at least 400 florins.

The fixed salary may not be altered. For instance, no part of it may be paid in the form of a bonus upon the number or the success of the pupils.

The *commune* is obliged to place a house, with, if possible, a garden, at the disposal of each teacher in charge of one of its schools; or, if it possesses no house suitable for the purpose, it may pay him a lodging allowance (*indemnité de logement*). *Communes* are left entirely free as to what augmentation of salary (if any) they will allow to teachers after a certain number of years' service.

No teacher may be engaged in commerce or practise any trade or other profession whatever. It is, however, difficult to estab-

lish exact limits. The law authorises a teacher to give instruction elsewhere than in the school. He can give religious instruction, and even private tuition; or he may teach in a trade or professional school. On the other hand, the communal council, while it may not interpose in an individual case, may always forbid teachers employed in the common schools of its district to give any instruction outside them.

Pensions.—Teachers in public Primary Schools of sixty-five years of age are entitled to a Government pension. A pension may also be given to teachers who, after ten years of teaching, become unable to perform their duties through illness. But no teacher has a *right* to such a pension.

A pension may in no case exceed three-quarters of the salary previously received by the teacher. The calculation is made according to the amount received by the teacher during the last twelve months of his service as a teacher. In this calculation the rent value of the house given him, or his lodging allowance, as the case may be, are reckoned.

Teachers pay to the Government 2 per cent. of their total receipts as teachers towards the provision of pensions.

There is no system of Government pensions for teachers in private Primary Schools. But various associations, both Protestant and Roman Catholic, have established funds for pensioning the teachers of their schools.

Interim Salary (traitement d'attente).—A teacher in charge of a school who has no post owing to the closing of his former school, receives during a period never to exceed five years an *interim* salary equal to half the amount of his receipts in his last position, provided he is not yet of the age for a pension. His lodging allowance is not included in this calculation. Similar *interim* salaries are also given to "ordinary" or assistant teachers, except that they cannot be continued for more than two years. In either case the *interim* salary is discontinued when they are nominated to some Government, provincial, or communal appointment with a salary equal to the *interim* salary, or if they have refused to take up such an appointment when offered to them.

Normal Schools.—The State founds and maintains Normal Schools for the training of teachers. The course of training lasts for four years; no class may consist of more than twenty pupils; at the head of the Normal School is a Director (or Lady Directress in Girls' Normal Schools) assisted by at least four teachers; all officials of Government Normal Schools are appointed by the Crown.

Every year before May a programme of studies for the following year is drawn up by the Director and submitted to the inspector of the district, who forwards it to the Minister of the Interior with his remarks upon it. Neutrality on matters of religion is obligatory in these schools.

The Director gives notice in the newspapers when pupils can be admitted to the Normal School. Candidates for admission must have completed their fifteenth year and may not have entered upon their eighteenth. The Director consults the teachers of the schools as to the programme of the examination for entrance; and this is submitted to the educational authority over him. But the examination is always upon the subjects taught in Primary Schools.

As only twenty pupils can be admitted at the same time, a selection has to be made when there are more than twenty satisfactory candidates. If their qualifications are equal, preference is given to those who live in the town in which the Normal School is situated, because Normal Schools for men teachers are always day schools. The Government pays for their lodging in the town, and these lodgings are chosen by the Director. Pupils of the Normal Schools for women teachers are lodged in the school.

A Primary School called a "Practice School" (*école d'apprentissage*) is attached to every Normal School. Pupils are in this way given practical instruction in class-teaching. These practice schools are also supported and managed by the Government as an integral part of the Normal School to which they are attached.

There are six Government Normal Schools: Groningen, Haarlem, Herzogbusch (*Bois-le-Duc*), Middelburgh, Deventer, and Maastricht.

Teachers in Normal Schools are not as a rule engaged in other work besides the training of the teachers in the school.

Communal Normal Schools.—Certain conditions have to be fulfilled before a private Normal School or a communal Normal School can become entitled to a grant from Government. Communal Normal Schools must satisfy the same conditions as Government Normal Schools. Their grant from Government is equal to one-half of their expenditure, provided that a maximum of 18,000 florins in the case of the Normal School proper, and 6,000 florins in the case of the Practice School attached to it, be in no case exceeded. But such grants can only be made to communal Normal Schools established under the law of 1878 and still existing. New Normal Schools established by *communes* are, since 1889, treated on the same footing as private Normal Schools. There are three communal Normal Schools under the law of 1878, those at Amsterdam, Leyden, and Groningen.

Private Normal Schools.—A decree of April 3, 1894, made it an indispensable condition of receiving a Government grant that the instruction of a private Normal School should be given in a special establishment by teachers, some of whom should be exclusively attached to the Normal School and should not perform other duties. The instruction must comprise the subjects included in the examination for the certificate of "ordinary teacher" and must be given during at least twenty-three hours per week. Private Normal Schools can be denomina-

tional both in organisation and in the instruction given by them.

The Government pays to every private Normal School 30 florins a year for every hour of instruction given during one week in the different branches, both obligatory and optional, enumerated in Clause 2 (Article 1.) of the law of 1889 (see above, pp. 350, 351). Grants are calculated on the assumption that the training lasts for four years.

Besides this ordinary grant, 400 florins is paid to every private Normal School for every ordinary teacher's certificate obtained by the pupils, taking the average number of such certificates obtained during the last five years.

Courses of training (Rijksnormallessen). These are quite distinct from the Government Normal Schools (*Rijksweekscholen*). They are not organised by or in separate or special establishments, but are merely courses of instruction given by acting teachers who are chosen for the purpose by the Minister from among those who seem most capable of the task. As a general rule, it is the district inspector who by his advice determines this selection. The Director also is appointed by the Minister. His functions are very like those of a Director of a Government Normal School; but he is expected to do his utmost to give opportunities of practice in class-teaching to the students who attend the higher normal course.

These courses of training are of various "degrees." The "first degree" comprises, besides all the obligatory and optional subjects of primary instruction mentioned in Clause 2 (Art. 1.) of the law of 1889, pedagogy, mathematics, and one modern language, either French, English, or German. Girls are also taught needlework, &c. Mathematics and modern languages are not taught in courses of training of the "second degree."

The course usually lasts four years, but sometimes a preparatory class is added. Candidates for admission to the courses must be fifteen years old, the age when a pupil may become a pupil-teacher (or twelve in the case of a preparatory class). They must prove that they have attended the courses in a Primary School. Their parents or guardians ought also to certify that the candidates are destined for the profession of teaching.

The entrance examination is upon the subjects of primary instruction, and those who show themselves to be sufficiently advanced may at once enter the upper classes.

Pupil-Teachers and Voluntary Teachers.—The pupil-teacher system of Holland is one of the features of its primary education that have suffered the least change in the successive legislative measures on primary instruction.

Its main features must here be outlined; and, in particular, the distinction between the pupil-teacher proper and the voluntary pupil-teacher must be emphasised.

By Article 8 of the law of 1889, head teachers in charge of a Primary School, whether public or private, can admit into their school young persons of both sexes between the ages of fifteen and nineteen, as pupil-teachers, provided they give three days' notice to the *arrondissement* school inspector. These pupil-teachers learn the practical work of teaching in the school and are not allowed to attend any class in the school as pupils. No actual class is held for them in the school; but they are always under the supervision of a certificated teacher while they are teaching, and are strictly forbidden to teach except under some such supervision. But while an "ordinary teacher" may supervise their practical work, their preparation for the teacher's examination must be undertaken by the head teacher, or at all events by a teacher with the rank of "head teacher."

After three months' work pupil-teachers receive a document attesting that their conduct and their progress have been satisfactory. Unless this attestation is granted to them, they must leave the school at the end of three months. In other words, even a pupil-teacher must pass through a probationary period. Moreover, the attestation or certificate once granted must be renewed every year, and this is the only method by which the head teacher of the school can dismiss a pupil-teacher; properly speaking, he has no right to turn a pupil-teacher away, but he may always refuse to renew the certificate. The certificate, again, must be countersigned by the *arrondissement* inspector; and this is not by any means a mere formality. It has never become a matter of course, but implies a definite approval of the continuance of the pupil-teacher's work in the school to which he is attached. If the inspector refuses to countersign the pupil-teacher's certificate, the head teacher may appeal within a fortnight to the district inspector.

A Government grant is given directly to the head teacher for every pupil-teacher trained by him according to the regulations just described.

It is even more important to note that the pupil-teachers as a general rule obtain other instruction in the theory and practice of education outside the hours during which they are actually teaching a class. The Government normal courses have already been mentioned, and there are also similar courses organised by *communes*, associations, or individuals, which the Government supports by grants. Like the Government normal courses, these comprise all the optional and obligatory subjects of primary instruction and "pedagogy" as well. And all who follow these courses of training are under rules similar to those enforced upon pupil-teachers, so far as the annual certificate of good

conduct and progress is concerned. The courses of training are given only by head teachers in charge of schools, whether public or private, and must always be during hours when the schools are closed. The head teachers form a kind of association; and this association is required to inform the *arrondissement* inspector of the names of the pupils attending the course, and of the dates when they began to do so. This is a necessary piece of information, because the grant is based upon the number of years during which the courses are attended. In any case, grants are made only in respect of pupils who have obtained a teacher's certificate, and the course of training must have lasted for at least two years previous to their entrance for the certificate examination.

"Every evening," wrote Sir James Kay-Shuttleworth in 1843,* "all the pupil-teachers of the town are assembled to receive instruction. The Society of Teachers provides from its own body a succession of instructors, by one of whom, on each night of the week, the pupil-teachers are taught some branch of elementary knowledge necessary to school-keeping. One of the most experienced masters of the town, likewise, gives them lectures on method, and on the art of organising and conducting a school." In many of the great towns what is described in these words actually takes place now. But in general the normal courses of training organised by the *communes* or by denominational bodies have taken the place of these voluntary associations.

Normal courses, or courses of training, organised by *communes*, associations, or individuals, receive grants in respect of every pupil who obtains the "ordinary teacher's" certificate, according to the number of years during which the successful candidate has attended the course, upon the following scale:—

Course of four years	-	-	-	300 florins.
Course of three years	-	-	-	250 florins.
Course of two years	-	-	-	200 florins.

Head teachers who have properly supervised one or more pupil-teachers in their schools receive grants upon the above scale for everyone who succeeds in obtaining the "ordinary teacher's" certificate. Grants can be claimed a fortnight after the examination for teachers' certificates. When the candidate has been prepared by more than one person, or in more than one course of training, the Minister is authorised to apportion the grant according to the period during which the candidate attended this or that course of training, or taught under this or

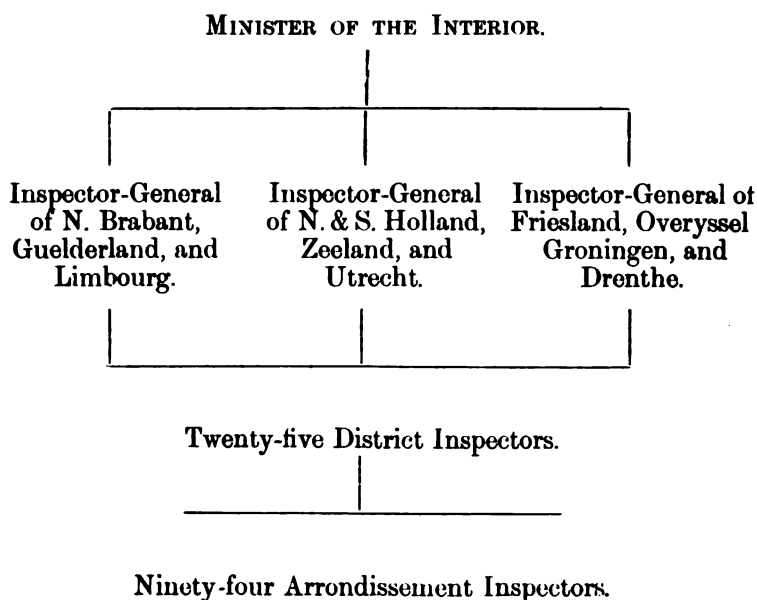
* "Second Report on the Training of Parochial Schoolmasters at Battersea." See "Four Periods of Public Education," p. 395.

that head teacher. Everyone in fact who has contributed to the training of a teacher has a right to be paid by Government for his share in doing so.

INSPECTION.

At the top of the whole educational structure there is a co-ordinated system of inspection. De Laveleye noticed forty years ago that the law of 1857 had omitted to place inspectors-general between the provincial inspectors and the Minister of the Interior, and regarded the omission as most unfortunate. The various alterations of the system have been described elsewhere in this volume. It is enough here to point out that, while the *provincial* inspectors no longer exist under the law of 1889, their place being taken by the *district* as distinct from the *arrondissement* inspectors, the link in the chain which de Laveleye thought the legislators of 1857 should have inserted, was practically supplied in the form of the "Inspectors" proper instituted in 1889. The system of school inspection can best be described in a figure.

Government School Inspection.



Local School Inspection.

There are between 200 and 300 Local Commissions for communal school inspection.

DISTRICT.	No. of Arron- dissements.	No. of Communes.
Hertogenbusch - - -	3	48
Breda - - - - -	4	33
Tilburg - - - - -	4	52
Eindhoven - - - -	3	51
Arnheim - - - - -	4	23
Zutphen - - - - -	3	33
Tiel - - - - -	4	60
's Gravenhage - - -	4	60
Rotterdam - - - -	4	56
Dordrecht - - - -	3	72
Amsterdam - - - -	2	21
Haarlem - - - - -	4	50
Hoorn - - - - -	4	63
Middelburg - - - -	3	54
Goes - - - - -	3	55
Utrecht - - - - -	5	72
Leeuwarden - - - -	5	18
Heerenveen - - - -	5	25
Zwolle - - - - -	4	32
Deventer - - - - -	4	29
Groningen - - - - -	4	32
Winschoten - - - -	4	25
Assen - - - - -	5	34
Maastricht - - - -	4	70
Roumond - - - - -	4	53
25	96	1,121

Total number of persons directly engaged in Government school inspection, 121; of whom 28 receive a fixed salary, namely, three Inspectors-General at 3,700 florins a year (with expenses paid up to 400 florins), and twenty-five District Inspectors at 2,500 florins (with expenses paid up to 300 florins). *Arrondissement* Inspectors receive only their travelling expenses, and a small sum to cover the expenses of the meetings of teachers summoned by them and to enable them to collect small libraries for the use of teachers in their *arrondissement*.

Such is, in rough outline, the system of inspection. All the officials first mentioned are nominated, suspended, or dismissed by the Queen. But the *arrondissement* inspectors are appointed

for six years only, although the Queen may renew their appointment for a further period of six years. The Inspectors-General and district inspectors, who are paid a fixed salary besides their travelling and office expenses, are not allowed to exercise any other functions or to pursue any other profession or trade without authorisation from the Crown.

Local Commissions.—Side by side with the Government inspection of schools and quite independent of it is a system of local inspection. The powers of the "*local commissions*" by whom this duty is generally performed are, however, defined by law, and this clause of the law of 1878 may as well be translated here since it does not occur in the amending Act of 1889, of which a translation will be found in this volume.

Law of 1878. Clause 74.

The Local Commissions carefully supervise all the Primary Schools in their *commune*. They visit them at least twice in every year, and see that all the provisions of the law are faithfully complied with in them; they note the number and qualifications of the school staff, the number of the pupils, and the quality of the instruction. Every year before March, they send to the communal council a report upon the state of education in the *commune*, . . . and send a copy of it to the *arrondissement* inspector. They notify him of every important change that has occurred in the educational condition of the *commune*; and they give to the *arrondissement* inspector, the district inspector, and the Inspector-General all the information which they desire. These Commissions are also required to instruct teachers who ask their help or their advice, and, in a word, to encourage by all means at their disposal the development of education.

Local Commissions are appointed by the communal councils, and only residents in the *commune* are eligible. Women are excluded from membership of them, although the commission is permitted to attach to itself a committee of women. In some *communes* a committee of women is actually charged with the inspection of the instruction given in manual work, sewing, &c., to girls and young women.

In cases where the *commune* does not appoint a special Local Commission such as is contemplated in clause 74 just quoted, the "College" of the Burgomaster and Aldermen undertake this duty *ex officio*.

Next in order above the Local Commissions or the ordinary communal authorities come the *arrondissement* inspectors. They can inspect all schools, public and private, within the boundaries of their *arrondissement*. They visit each school twice a year and make a detailed report upon the situation of the schools four times a year. This report is sent in to the district inspector. They also secure the establishment of Local Commissions for inspection, where these seem desirable; and often attend the meetings of such commissions. *Arrondissement* Inspectors supervise the Normal Schools and the courses of normal training supported by the Government, by the *communes*,

or by private associations. They report upon these to the district inspector and suggest what improvements they may consider desirable. They are given a small sum every year to be devoted to buying books for a small library for the use of teachers and to covering the small expenses of the meetings of teachers which they summon from time to time.

District inspectors are obliged to live in the principal town of their district.* By letters of enquiry and by personal visits, as well as through the reports sent to them by the *arrondissement* inspectors, they must keep themselves fully informed of all that is going on. They are required to promote the establishment of new schools. At least three times a year they summon all the *arrondissement* inspectors to discuss with them the interests of education in the district; and every year before May they send a general report to the Inspector-General and to the permanent "deputation" (the local financial authority over the *communes*) upon the schools. They also send to the Inspector-General a report upon the meetings of inspectors and others over which they have presided.

Finally, the Inspectors-General† inform the Minister of the Interior of all the needs of the national education and advise him as to the measures calculated to supply them. For this purpose they meet at the Minister's office at least once a year. Every year, too, they are obliged to send a report to the Minister upon the state of education in the provinces under their jurisdiction. Inspectors-General may visit schools when they wish to do so, and may summon meetings of the district inspectors or of the *arrondissement* inspectors under them.

All Inspectors have the right to enter public and private schools in their sphere of inspection; and all schools must at once be opened to them upon the first request. Every head teacher and every assistant teacher of a school is required to give all the information they ask for, whether verbally or in writing, at the time of their visit to the school or not. Inspectors are charged to see that no instruction contrary to good morals or leading to disobedience to the laws shall be given.

Teachers who obstinately refuse to obey an order from an inspector of any rank are liable to a fine of 600 florins or an imprisonment of three months.

Beyond verifying the amount alleged to be raised by school fees and dividing this by the number of pupils in attendance in order to obtain the average school fee, the inspector may not concern himself with the financial position of any private school.

* I.e. practically in the "county capital"—*chef-lieu de leur circonscription*.

†The title Inspector is confined in the Dutch terminology to the Inspectors-General, i.e., *Inspecteurs, districts-schoolopzieners, arrondissements-schoolopzieners*.

On the whole, the private denominational schools are well satisfied with the manner in which inspection is carried out. Their freedom from unnecessary interference is fully guaranteed by the provisions of the law, and they recognise both that inspection must accompany a system of Government grants and that it makes for their own efficiency.

IV.

HISTORICAL INTRODUCTION TO THE COMPULSORY
EDUCATION ACT 1900.

No one who has had occasion to study the educational development of Holland can have proceeded far in his subject without discovering the historical importance of a society founded at Edam in 1785 by a Mennonite Pastor, John Nieuwenhuizen, and called "The Society for the Public Good." One very interesting mention of it and its educational work will serve to point the contrast between the Compulsory Education Act of 1900 and a period when in Holland the State was only just beginning to take upon itself the work of public education. Victor Cousin, writing in 1836 on the state of education in Holland, which he visited "for the purpose of continuing his inquiries into the different systems of education among the great civilised nations of the world," notes one very important point in which the Dutch education law at that time differed from the law of Prussia, which he had previously studied.* There was, he observed, no obligation imposed by law on parents to send their children to school, when they could not show that they were educated at home. "In Holland . . . where both municipal and parental authority have immense power, and where there is a very influential association, the Society for the Public Good, which has been long at work, and continues actively to promote and to encourage the education of the people throughout the country, the obligation imposed by the Prussian law could not be imposed, nor was it indispensably necessary."

Cousin was a shrewd observer; and his testimony to the fact that this Society had by its educational work supplied the want of some compulsory legislation both before and after the law of 1806 is the more remarkable in that he himself frankly professes his belief in such legislation. It amounts to saying that a large part of what must otherwise have been done by the State and through compulsory legislation was in fact done by a private association through encouragement and by other effort.

* "On the state of Education in Holland, as regards schools for the working classes and for the poor, by M. Victor Cousin. Translated, with preliminary observations, . . . by Leonard Horner, Esq., F.R.S." John Murray, 1838.

He has been the first to point out that more than one view has been taken of the subject. Holland has adopted a compromise in his attitude of compulsory attendance. It is not complete, it is not universal, and it is not permanent. It is a compromise between the two extremes of no attendance at all and compulsory attendance for all. It is a compromise between the two extremes of no attendance at all and compulsory attendance for all. It is a compromise between the two extremes of no attendance at all and compulsory attendance for all.

It is a compromise that has been reached in which the people of Holland have been led to the conclusion in so far as the majority of the people can be said to agree with it, that compulsory attendance is a necessary and necessary for the progress of education. It is to the fact of 1899 that we must look. The compromise upon the most difficult of the educational problems which was effected in 1899. It is to the fact of 1899 that we must look. The compromise upon the most difficult of the educational problems which was effected in 1899. It is to the fact of 1899 that we must look. The compromise upon the most difficult of the educational problems which was effected in 1899.

As George Stoddard in his "Report on the condition of the Secondary School in Holland and Belgium," dated 1898, remarks that "the State has not rendered education actually obligatory upon the municipalities, neither has it required evidence of the education of the children of the poorer classes by any educational test. For a sense of the importance of education pervades the entire community. It is sought by the poor for their children with an earnestness similar to that observed in the more wealthy classes in other countries, and in Holland, the direct interference of Government is confined to regulating the mode of instruction by means of an organized system of inspection."

In 1880, one province, Groningen, had made an experiment in compulsory school attendance. The device was indirect and ingenious. A regulation was enforced obliging every father of a family to pay school fees (*schoolgeld-pligtigheid*) for every child of his between the ages of six and twelve years, whether they frequented the public school of the *commune* or not. If the parent could show that his child or children received a primary education, either at home or in a "private" school, he was exempted from this obligation. The regulation had a marked success, and the number of truants became insignificant. The number of children attending school rose from 20,000 to 30,000 in a few years.

The *Schoolgeld-pligtigheid* or Compulsory School fee, established in Groningen, was adopted also (according to Matthew Arnold) in Drenthe and in Overijssel. But Arnold possibly misunderstood a reference by de Laveleye to rules introduced in those two districts in 1830 and 1866 respectively.

However this may be, the example of Groningen in 1839 was not generally followed.

A writer, describing the organisation of a Poor School at the Hague in 1850,* says that children were received at the age of six and remained until twelve. Whenever a child was absent another was immediately sent to inquire the cause. Wilful absence of fifty times in six months was punished by irrevocable exclusion, but this, he added did not happen more than about once in four years.

Until last year, 1900, there had been no compulsory attendance at school, and, what is still more important, no compulsory education. The State had not until then laid it down that every parent is obliged to have his children educated, although the principle had long been admitted, and the advisability of making education a compulsory obligation of parents had often been discussed in the Chambers and elsewhere.

In the Debates upon Article 32 of the law of 1857, the adherents of compulsory education made fresh efforts to introduce at the least some indirect form of penalty to be imposed on those parents who neglected the education of their children and did not send them to school. It will be seen that the law of 1878 did introduce some such indirect method of compulsion; but the country was not ready for such legislation in 1857. M. Blaupot ten Cate in the debates of 1857 proposed to establish by the new law the obligation to pay school fees for all children between the ages of six and twelve, whether they attended school or not, unless it could be shown that they were receiving an education at home or elsewhere. This statesman, who was always to the fore where the interests of primary education were concerned, represented Groningen; and naturally he cited its example in favour of the proposal. But it was rejected.

"The usual arguments for compulsory education were adduced—that other countries had successfully established it, that ignorance was making rapid strides for want of it—that in China, where it reigns, all the children can read and write. It was replied that compulsory education was altogether against the habits of the Dutch people. Even in the mitigated form of the *schoolgeld-pligtigheid* a large majority of the Chamber refused to sanction it."†

Émile de Laveleye noticed so early as 1858 that the figures of the pupils in attendance at public schools were unsatisfactory, and increasingly so. "It was possible," he said, "to congratulate oneself upon the great progress that had resulted in this respect from the law of 1806. Unhappily this progress has not been

* "Notes from the Netherlands" in Chambers's *Edinburgh Journal*, vol. xiv. p. 261. The master of this Poor School on parting with the writer (Mr. Chambers) said "Farewell *mynheer*; I hope soon to hear that your *puissante patrie* will have enough of schools as good, or better than, this."

† Matthew Arnold: *Education Commission Report*, 1861, p. 151.

continued, and during the last few years it is impossible to disguise the fact that there is actually retrogression, a marked retrogression, all the more deplorable in that it seems to get quicker and quicker. In 1835, there were 304,450 pupils in the ten Provinces of Holland, which meant a ratio of one pupil to 8.3 inhabitants. In January 1848, and January is the most favourable time for school-attendance, we find 128.4 pupils to every 1,000 inhabitants, or one pupil to 7.78 inhabitants . . . ; there is therefore a slight progress as compared with 1835. But in 1854 it is no longer the same thing; we find in January only 106.8 in 1,000, that is, one pupil to 9.83 inhabitants . . . , which constitutes a notable difference and a difference for the worse. . . . This is among the most serious facts of the situation—one that all those who are interested in the prosperity and the liberty of Holland cannot sufficiently regret.”*

“For several years previous (to 1857), a decrease in the number of scholars had been observed . . . it might be accounted for by the supposition that the children had left the public in order to enter the private schools, which was a daily occurrence. The evidence that freedom of instruction was degenerating into liberty to remain in ignorance, became a source of anxiety, and some of the delegates (in the Chambers) endeavoured on this account to reconcile compulsory attendance at school with the principles affirmed in the Constitution.” Their motto was:—“Instruction compulsory and gratuitous. . . .†”

Professor Leroy also states that, in accordance with Article 33 of the law of 1857, “several of the large cities, Rotterdam among others, have made their support of the parents conditional upon the school attendance of the children.”

It should be noted that until the Education Act of 1878 came into force the local authorities charged with the distribution of poor law funds (*administrations civiles de bienfaisance*) had power to refuse all assistance to those parents whose children were not receiving any education. In some cases this power had been abused, for it was easy to exercise it in such a way as to render attendance at the public elementary school obligatory upon all children. Thus it was a possible weapon of attack upon the denominational school.

Some excellent remarks upon the whole question of school attendance in Holland are made in the report published by the Royal Commission of the Netherlands in 1876.† These remarks are especially interesting because they were written so soon before

* “*Débats sur l'Enseignement Primaire*, 1857, p. 7.

† Prof. Alphonse Leroy of the University of Liège, Belgium. Report of 1860. Translated in Barnard's “*Systems of Public Instruction*.” New York. 1872.

‡ “*Elementary and Middle-Class Instruction in the Netherlands*.” A. W. Sythoff. Leyden. 1876; perhaps prepared for the international exhibition at Philadelphia in that year.

the measures of 1878, and because they give an account of the work done by private associations for the promotion of regular school attendance. Thus we find that in 1873 the work which had been done up to 1836, as Victor Cousin noticed, by the Society for the Public Good, was still undertaken with more or less success by similar associations of persons interested in the progress of the national education. The Dutch, one of the most individualistic nations in the world, have always disliked compulsory legislation. Not until the inadequacy of private effort to secure regular attendance had been proved by the experience of ninety years or more, did compulsory school-legislation become a question of practical politics, and even then it was passed by a majority of one vote only in a representative Chamber.

The remarks referred to are as follow:—"It is not to be denied that the opportunities for instruction are far too much neglected. Several causes tend to this. Indifference of the parents, in the first place:—they themselves have jogged on without learning, or without learning much; the children need not plod so long at school.

"But this is not the only cause, perhaps not even the principal one. . . . In the larger *communes* where it is desirable for the mothers to earn something too, the children, especially the girls, are often kept from school for domestic occupations; elsewhere, especially in manufacturing places, and often among small tradespeople, the children are required to earn something too, the parents' wages being but trifling; but what more than anything else tends to paralyse the efficiency of the school and the cultivation of the people, is field labour and the tending of cattle. Not only, or exclusively, the more indigent labourers make their children take part in the labours of the field, but the wealthier farmers are guilty of the same abuse. In Drenthe and Overijssel there are the peat grounds; in Groningen—where, however instruction stands very high—it is the culture of flax; in South Holland, along the Yssel, the brick-fields; here and there spinning; and everywhere—mostly, and sometimes exclusively, in the summer months—agriculture, which undermines what moral influence endeavours to establish.* . . . Pauperism, too, contributes to foster this evil. Though this cause may not be the most powerful, yet it certainly goes a great way. Want of clothes or shoes prevents many a child from being sent to school,† for a time at least, if not for long. In this way irregular attendance is promoted."

* The passage bears obvious marks of translation from the Dutch. No general moral disapproval of agriculture is here implied. The regular attendance which Dutch societies had endeavoured to produce by moral suasion had been counteracted by the attractions and exigencies of agricultural life.

† Cf. the proposal made by the Socialist member, M. van Kol, the amendment of M. de Boer, and Article 35 as finally passed in the Act of 1900. See below, p. 397.

The Report continues with a description of the efforts of certain associations, and of the attitude generally adopted towards the whole question. "Has the question ever been mooted in the Netherlands, What ought to be done in order to combat this enemy successfully? It certainly has; but the answer does not meet with the sympathy of all parties. After certain authorities and teachers had pointed out the extent of the evil, a Union was formed to combat non-attendance at school—'The Netherlands School League.' At the beginning this School League met with encouragement and co-operation; it spread all over the country in more than a hundred departments. Its aim was to promote schooling, and a regular school attendance without legislative interference, and by mere moral influence School festivals were instituted; prizes for regular attendance offered; school libraries established; increased opportunities for receiving instruction were insisted on, as also the augmentation of the staff of assistant teachers; the encouragement of needle-work was urged as a powerful means to keep girls longer at school, but in vain. . . . Yet it must be gratefully acknowledged that the labours of many departments of the School League, and of several local and independent societies for the promotion of regular school attendance, have had a beneficial influence.

"Another corporation, the 'Union for the promotion of Popular Education,' has from small beginnings obtained a considerable range, and bears on its banner *Compulsory Schooling*, but compulsory schooling with ample and efficient means for obtaining good instruction.

"Great is the number of those who, from antagonists, have been converted into champions of compulsory education, partly from the experience that moral means are nugatory, but also partly from the powerful influence of the last-mentioned society. The conviction, however, of the necessity of introducing compulsory education is, as yet, far from being generally prevalent.

"By far the greatest number, even the most zealous advocates, acknowledge that the time for its introduction is not yet come; that augmentation of the number of schools, extension of the staff of teachers, must precede. This, therefore, is strenuously insisted on. It is to be hoped, however, that as long as compulsory education cannot be introduced, the strenuous exertions of those who desire to work only by means of moral influence will prevail."

These comments were put forth in 1876, and give an accurate account of the views entertained at that date. From the manner in which the Report speaks of "mere moral influence," it is evident that some dissatisfaction was felt by the writers with the method of suasion which had so far been upheld as the only satisfactory method of improving school attendance. [It was something nearly akin to moral suasion that was adopted in the law of 1878, only that the indirect method there enacted was rather to penalise those who were irregular, than to reward or encourage those who were regular, at school.

The following are the clauses of the law of 1878 which dealt with this question of school attendance.

Law of 1878. Art. 80.

Every year before the 1st of February, the head masters of primary schools, whether public or private, shall send to the Burgomaster and Aldermen of the *commune* in council assembled a list of the children between the ages of six and twelve years who were in attendance at their schools on the 1st of January. All teachers who give home-instruction * shall send a similar list of the children they educate.

Art. 81. The Burgomaster and Aldermen shall draw up a list of the children of school age who are resident in the *commune*, and they shall make mention therein of those children not receiving any education. The parents of these children cannot obtain any other form of communal assistance, except medical assistance, unless they can prove, either that a mistake has been made in regard to their children, or that it is due to circumstances beyond their control that their children do not attend school.†

Although the principle involved in such legislation, *i.e.*, the right of the State to insist that parents should have their children educated, was generally admitted, the clauses just quoted were passed with difficulty.

In the debates upon the law of 1878 the question of actually enacting compulsory instruction had already been raised. Indeed, it appears that by that time the "Liberal" party as a whole had adopted this among the series of reforms that made up their political programme. The proposal was rejected by the Cabinet of 1878, but not from any dislike of the principle involved. The Government went so far as to instance with approval the example set in certain countries which had recently admitted the compulsory principle into their educational legislation.

But at that period the opposition felt towards the "neutral" public school was too strong. It would have been impossible to limit any further the right of parents to choose their own type of school for their own children.‡

On the other hand, the time was not yet ripe for an official recognition of the denominational schools as enjoying the status of public schools; and nothing less than such a recognition would have been implied by compulsory clauses in which the education given in denominational schools should be declared sufficient for the purpose of the obligation.

Nor was it merely a respect for the liberty of parents that decided the Government of 1878 against compulsory clauses. It

* *L'enseignement à domicile.* It was thus defined: "Instruction given in common to the children of at most three families in the residence of the head of one of these families is considered to be home-instruction."

† " . . . ou que c'est pour des motifs indépendants de leur volonté qu'ils ne vont pas à l'école." This was only intended to cover cases of inveterate truancy out of the control of parents. It should not be confused with the "outweighing objections" referred to by the Act of 1900. (Art. 10.)

‡ Moyersoen, p. 53. "*La faculté de préférer l'école la plus conforme à ses idées eût paru un vain mot dans les communes qui ne possédaient pas d'écoles privées; les parents eussent été forcés d'envoyer leurs enfants dans un établissement neutre, alors même qu'ils eussent cru à la nécessité absolue d'une école professionnelle.*"

was a matter of expediency as well as of conflicting principles. To swell the ranks or augment the grievances of the opponents of the neutral public school was a thing to be avoided at all costs.

Accordingly the Government went no further than to offer inducements to parents in this matter, as will be seen in the Articles of the law of 1878 just quoted (Articles 80 and 81).

During the discussion in 1889 of these clauses of the then existing education law, M. Goeman Borgesius proposed an amendment which would have admitted the principle of the obligation of parents to educate their children, without, however, enacting any penalty for its neglect. But the Government of 1889 was a coalition in which the dominant element was Calvinist; and their attitude towards the question was very different from that taken by the Liberal Government of 1878. They were actually hostile to the principle itself as a dangerous extension of what is called "State interference." Moreover, to enact the parental obligation to educate children would have implied, in those districts where there were no "private" schools, the obligation of parents to send their children to the "neutral" public school, and this the Calvinist element could not in any case approve. M. Borgesius' amendment was thrown out, and the original clauses of the Act of 1878 were passed in the law of 1889.

But, while the *communes* were by the new law required to encourage regular attendance at school as much as possible, their former power to refuse all forms of communal assistance, except medical aid, to parents whose children were not receiving any education was now to be more liberally interpreted so as to include a "private" school, as well as a public school, education. Nothing could be more contrary, says M. Moyersoen, to the spirit of the new law than a decision by which the benefits of poor law aid should be made conditional upon regular attendance at a public school. When the *communes* were charged to secure regular attendance they were not intended to make any distinction whatever between attendance at a public, and attendance at a private denominational, school.*

Two small advances were, however, made in this year towards the encouragement of regular attendance. One was the prohibition of the employment in factories of children under twelve years of age which was contained in the law of May, 1889. The other was in the Education Law itself. One of its clauses (82) gave power to the communal councils to apportion prizes and public distinctions for regular attendance at school. These prizes could of course, be won by pupils of private denominational, as well as of public, schools.

"School age" has never been defined by law in Holland until the present year. Neither the age for entering nor that for

* Moyersoen, *op. cit.*, p. 102—*elle (la loi) lui défend d'entraver sous aucun prétexte la liberté des pères et mères d'envoyer leurs enfants dans une école privée. Rien ne serait plus contraire à l'esprit de la loi et à l'ordre public qu'une décision des bureaux de bienfaisance pour soumettre la jouissance des secours à la fréquentation des écoles publiques.*

leaving school has been determined until now except by the local customs of each district. And even these local customs had remained unchanged under all previous legislation. There had been neither positive nor negative measures taken to determine the limits of "school age."

In 1857 an attempt had been made to remedy the evils that resulted from the pupils leaving school at an early age or at least before they had received the full benefits which a primary schooling is designed to confer. This attempt took the form of "schools for adults" similar to what we in England call "continuation schools." But, according to M. Moyersoen, this remedy only aggravated the disease.*

The statistics of school attendance given in the Report published by the Royal Commission of the Netherlands (1876), show that the attendance of girls was less regular at all ages than that of boys during the period from 1862 to 1873; and that, especially with boys, attendance was less regular between the ages of six and nine than it was between nine and twelve.

By the law of 1889 communal councils were empowered to determine the ages for entering and leaving the public schools. But their decisions were referred to the "Deputation" of the Province; that is, to the authority responsible for checking the budgets of the *communes*, for transmitting to the Minister of the Interior the claims for Government grants submitted by the *communes*, and for distributing to the *communes* the money paid to it on their behalf.

In 1889 it would doubtless have been possible to fix the age for leaving town schools at twelve; but any such measure would have been fatal to country school education, because the continuation schools, or "schools for adults," were rare in the country districts. Moreover, in summer the country schools are very irregularly attended, so that the limit for leaving school should be higher in age for country than for town schools. But some measures had to be taken to prevent any *commune* putting obstacles, from motives of economy, in the way of children who desired to attend beyond a certain age. Consequently the law of 1889 contented itself with empowering *communes* to fix their own "school age," and made no suggestions as to what "school age" should be.

As a general rule children attend school in Holland between the ages of six and fourteen years. There are two clear indications that six and twelve years were for all practical purposes regarded as the beginning and the end of school age, in towns at least, about ten years ago. Schools attended only by children under six years of age were expressly excluded from the application of the law of 1889, and the Factory Employment Act of the same year prohibited the employment of children under twelve. But, as we shall see, the Compulsory Act of 1900 fixed the ages at seven and thirteen.

Op. cit., p. 69; "*ce remède, bon en soi, ne fit qu'empirer le mal.*"

In this connection it is noteworthy that the *communal council* was empowered to prohibit the employment of children between the ages of six and twelve in trades or occupations not already covered by the prohibition contained in the Factory Employment Act of May, 1889. Had this power been properly used in country districts, much might have been effected towards mitigating the evil of truancy. But, like school attendance committees elsewhere, the communal councils have generally been reluctant to use their powers fully; and the employment of young children at home or in the small tasks of an agricultural life has continued without much interference. Irregular attendance in country districts* (together with the curtailment of the period of school life) was the least satisfactory feature in the educational system of Holland when the new régime of 1889 was fairly established.†

A word as to the attitude of the religious parties towards this question. They are, or at least have been, generally hostile to compulsory education. On the other hand, many members of all communions are fully alive to the dangers which wide-spread "truancy" may involve for a nation in the present day when the ignorant are at the mercy of agitators of every hue. But they consider further State aid to the denominational schools, and further facilities for parents who desire to send their children to them, to be the first thing requisite, and an indispensable preliminary. Their support to the principle of obligatory education is, in fact, conditional upon a further improvement in the position of denominational schools.

It has been remarked that the Liberal party as a whole had adopted "obligatory education" in their programme of reforms even before the Act of 1878. They have held firmly to it since. In 1892 the question once again came to the fore. But eight years were to elapse‡ before the idea could gain sufficient strength to enable it to survive the disintegrating process of debate in a representative Chamber.

Thus a brief review of the history of the compulsory idea in Dutch education conveys the impression that, had it not been for the religious difficulty, the obligation of parents to get their children educated would have received a legislative sanction to reinforce its moral cogency some twenty years ago. The first serious step was taken in the law of 1878; but its purpose was to be attained in a very indirect and, one may suppose, an unpopular manner. Ten years later, in 1889, we find that a reaction against compulsory attendance, whether enforced by direct or indirect means, had entered the Government with the Calvinist element which at that time held the balance of political

* Especially in the Limbourg district, Moyersoen, p. 123.

† This was not until 1892-3. The law came into force in 1890.

‡ Moyersoen in 1895 wrote, "*on en parle moins aujourd'hui; d'autres soins occupent, d'ailleurs, le ministère, et il est probable que bien du temps s'écoulera encore avant qu'il présente un projet dans ce sens.*"

parties. The indirect method of compelling parents to educate their children adopted in the law of 1878 was once more embodied in the new law, but rather from a dislike of changes not imperatively necessary than from any affection for the principle involved. In the ten years succeeding the great educational change of 1889 the general prosperity of education in Holland, owing to the settlement of the religious difficulty, was marred by one unpleasant feature—attendance was still spasmodic and irregular. Finally, in 1900, an Act (framed with elaborations and exemptions that would appear excessive and dangerous to those who had not studied the question in its particular complication in Holland) was passed, bringing Holland into line with those other nations whose example was quoted with mild and academic approval by the Government of 1878.

Most of those who read the text of the Act of 1900 will get an impression that it belongs to the type of legislation known to the impatient as "timid." Guarded and careful it is, without doubt. But it would be unwise to set it down as hesitating and self-destructive without a further study of the process to which it was submitted before it became law.

The opposition which the Compulsory Education Act of 1900 experienced should not be traced solely to the religious question affecting primary schools. In 1837, Mr. Horner, whose translation of Victor Cousin's report has already been quoted, remarked that the Dutch were "as jealous of their freedom as we are." This national characteristic is unchanged; and the dislike of compulsion in any form accounts for the greater part of the opposition that the Bill experienced; although, no doubt, the dislike was aggravated among certain types of political opinion by the religious question implicated in this instance.

But the balance of parties was affected by a question outside the domain of education as ordinarily understood. During the debate on the first reading in the Second Chamber a proposal was made by M. van Kol, a Socialist member, that the communal authorities should be obliged to furnish poor children attending public or private schools in their district with food and clothing. This proposal having been rejected, M. de Boer introduced a clause empowering, but not obliging, the communal authorities to assist the children of poor parents in this way, according to their discretion. *Forty-nine* members of the Second Chamber voted in favour of M. de Boer's clause, and *forty-eight* against it.

It seemed doubtful whether the Bill would pass at the second reading. Everything depended upon the attitude of the four Socialist members towards this clause. The compromise did not satisfy them; and, in their desire for a clause legally *compelling* the *communes* to provide food and clothing to poor children, they voted against the Bill on its second reading.

But in the meanwhile two supporters of the Government had

reappeared to vote for the Bill, and two Clerical Democrats had shifted their ground. The Bill passed the Second Chamber by *fifty* votes against *forty-nine*, and became law on July 7, 1900.

A few words of comment upon the significance of one or two of its clauses will prevent misunderstanding. Clause 3 of Article 7, taken with Article 10, provides that, when parents have an overmastering objection to the instruction given in all the primary schools within a certain distance from their homes, and their written declaration to this effect has been countersigned by the school inspector of the *arrondissement*, they may be exempted from the obligation imposed by the Act. This provision seems at first sight to be contrary to the whole principle of the Act; but a further study of Article 10 will probably convince most readers that the declaration for which it provides will be but seldom submitted by parents. Public opinion and self-respect will work together against an abuse of this clause; and, if there should be cases where both proved ineffective, the signature of the inspector would always have to be obtained before the exemption could be granted. It is not to be supposed that many persons will care to declare in writing every twelve months that they propose to leave their children without any education, unless indeed their objections to the instruction given in the schools both public and private really are "outweighing."* The renewal of the public declaration every twelve months, together with the force of public feeling against the neglect by parents of their children's education, will compel those who entertain such objections to weigh them carefully, and annually to reconsider the grounds upon which they are based.

R. BALFOUR.

* The wording of the Act is "overwegende bezwaren," *lit.*, outweighing objections.

V.

APPENDICES.

(i.) RECENT EDUCATIONAL LEGISLATION IN THE
NETHERLANDS.

A.—COMPULSORY EDUCATION LAW.*

JULY, 1900.

Law of the 7th July, 1900, containing provisions for regulating compulsory education.

We Wilhelmina, by the Grace of God, Queen of the Netherlands, Princess of Orange-Nassau, &c., &c., &c.

Know all men by these presents :

Having taken into consideration that it is desirable to promote the primary education of children by legal provisions for controlling non-attendance at school, for determining at what instruction attendance shall be required, and for assuring opportunities for receiving repetition lessons.

Having consulted the Council of State and deliberated with the States-General, have approved and sanctioned the following articles :

TITLE I.

Of the usual primary education.

ARTICLE 1.

Parents, guardians, and other persons charged by the law, or by arrangement, with the care of children, so far as those children live with them or in the institution under their control, are bound to provide that during the time, and in accordance with the regulations enacted in this law, due primary education shall be given to those children.

This obligation shall be fulfilled by them :

1. Either by providing that the child shall be placed as a pupil at a primary school and that it shall attend the school regularly :

2. Or by giving, or causing to be given, to the child home instruction.

ARTICLE 2.

By the primary schools mentioned in Article 1 shall be understood all schools for primary instruction, either public or private, in which instruction is given in the subjects mentioned under *a—h* in Article 2 of the law for regulating primary education.

Attendance at school shall be considered as regular, if for two consecutive months there have not been more than two omissions without reasonable excuse.

The home instruction mentioned under 2, in Article 1, includes the subjects named in connection with a good curriculum under *a—g*, in Article 2 of the law for regulating primary instruction.

* This translation was forwarded to the Foreign Office by the British Minister at the Hague. It is here published by permission of the Foreign Office.

ARTICLE 3.

In cases where preference is given to instruction in a school, the obligation to provide that the child shall be placed at a primary school begins as soon as it has reached the age of seven.

This obligation ceases as soon as the child has been six years a pupil of a primary school and has gone through all the classes, or, when the instruction is given in classes which take up a longer time than six years, so many classes as include a period of six years, provided that in the last case the obligation does not cease until the child has reached the age of twelve and has passed through the class in which it was placed on reaching that age. A child, which on its admission to the school is at once placed in a higher class, shall be considered to have passed through the period of instruction which the lower class or classes take up.

The obligation ceases in any case if the child has passed through the class in which it was placed on reaching the age of thirteen.

ARTICLE 4.

In cases where preference is given to home instruction, the obligation to provide that such instruction shall be given to the child, begins as soon as the child has reached the age of seven.

As regards a child to which home instruction in the sense of this law is given before or after it has reached its sixth year, this obligation ceases on its attaining the age of twelve, if the child has then been receiving instruction for six consecutive years.

As regards a child, which begins to receive home instruction at a later period than the one mentioned in the preceding paragraph, the obligation ceases on its attaining the age of thirteen.

Parents, guardians, and other persons mentioned in Article 1 shall be considered not to have fulfilled their obligation to supply home instruction so long as they have not made a return to the burgomaster of the commune in which they reside detailing in the form of a declaration signed by them :—

1. The subjects in which the children receive home instruction ; 2. (a) the surnames of the children, with their Christian names, date of their birth and place of actual residence, as also the place where the instruction is given ; (b) the surnames and Christian names of the persons by whom the instruction is given. If Article 7 or Article 15, under letter *a*, of the law for regulating primary education is applicable to the person giving instruction this fact shall also be notified.

This declaration, which must also be signed by those persons who give the instruction, should be sent in every year before 1st February.

Any change in the persons by whom the instruction is given shall be notified to the burgomaster within twenty-eight days.

It shall be fixed by Us in what manner those returns are to be drawn up, and how they shall be brought to the knowledge of the arrondissement inspector of schools.

ARTICLE 5.

The obligation to provide that the child shall regularly attend the school in which it is entered as a pupil begins on the day on which it can for the first time take its place at the school.

ARTICLE 6.

The obligation mentioned in Article 1 is not fulfilled :—

1. So long as the child, having attained the age of seven and not being beyond the age for receiving instruction according to the third paragraph of Article 3, that is to say, not being thirteen, is not placed as a pupil at a primary school, and does not receive home instruction according to the

regulations of the law, while there is no proof of the earlier termination of the period of compulsory education according to the second paragraph of Article 3, or the second paragraph of Article 4, nor of any legal exemption.

2. So long as the child, placed as a pupil in a primary school and not being beyond the age of compulsory education according to the second or third paragraph of Article 3, does not attend that school regularly, whilst there were no valid reasons for temporary irregularity, nor proof that the person responsible for the fulfilment of the obligation did everything in reason that was possible to prevent irregular school attendance.

ARTICLE 7.

Parents, guardians, and other responsible persons mentioned in Article 1 are exempt from the obligation imposed in Article 1 so long as :—

1. They have no settled home.
2. They send the children to a school, which is considered to belong to the higher or intermediate instruction, and where the children in addition to the evenings receive at least sixteen hours' instruction in the week.
3. They have serious objections to the instruction in all the primary schools situated within the distance of four kilometres from their home, in which the children could be placed.
4. They can get no places for the children in any primary school situated within the distance of four kilometres from their home, notwithstanding their application for admission.
5. The date for admission to the primary school, in which the promise of a place has been obtained has not yet come.
6. A legal order prohibits the child from attending primary schools.
7. The children, according to a written declaration of a medical practitioner, are not proper subjects for attending a primary school or a primary school situated within the distance of four kilometres from the home.

The distance mentioned in 3, 4, and 7 of this Article shall be measured along the shortest road that is in use.

ARTICLE 8.

Those persons who remain in a commune longer than twenty-eight consecutive days, no matter whether they live in a house, tent, boat, or van, shall be considered for the purposes of this law to have a fixed domicile in the commune until the day when they again leave that commune, unless they have a fixed domicile elsewhere where the children go to school.

ARTICLE 9.

Parents, guardians and other persons mentioned in Article 1 who have a fixed domicile cannot claim any exemption from obedience to the obligation laid upon them in Article 1 until they have given notice to the burgomaster of the commune in which they are domiciled, for which child and for what reason they can claim an exemption.

This notice, so long as the claim to exemption is continued, and the children are still at the age for attending school, must always be sent in afresh on the expiration of twelve months.

It shall be fixed by Us in what manner these notices are to be drawn up, and how they shall be brought to the knowledge of the arrondissement school inspector.

It shall also be fixed by Us through whom and in what manner the names of the children which have been submitted with a view to placing them in a primary school, but who have not yet been admitted, shall be brought to the knowledge of the arrondissement school inspector.

ARTICLE 10.

Parents, guardians, and other responsible persons mentioned in Article 1 can claim the exemption under 3 of Article 7 only if they have appended to the notice mentioned in the first and second paragraphs of Article 9 a

declaration in writing that they have such strong objections to the instruction in all those schools situated within the distance of four kilometres from home, in which places can be obtained for the children, that they would rather their children should for the present go without the instruction required by law, than entrust them to one of those schools.

This declaration, to render it valid, must also bear the signature of the arrondissement school inspector. This official is bound to give his co-operation by affixing his signature within twenty-eight days from the application.

Whenever the school inspector ascertains that the child had been placed for the year preceding the date of the declaration at the school, or one of the schools, to which objection is made, and he is convinced that no serious objection to the instruction, but some other reason, has led to the application for exemption, he shall refuse his co-operation.

If the arrondissement school inspector refuses to countersign the declaration he shall immediately give notice thereof, with his reasons for it, to the person interested. This person within a fortnight from the date when the refusal is made known to him may appeal to the district school inspector, who shall decide within three weeks. If his decision be favourable this official shall affix his signature to the declaration. He shall at once give notice of his decision to the person interested and to the arrondissement school inspector.

Up to the day on which the final decision is made known to them the parents, guardians, or other responsible persons mentioned in Article 1 are exempt from the obligation mentioned in Article 1.

ARTICLE 11.

A child placed at a primary school may have his name removed from the list of pupils by the head teacher of the school on the application of the person responsible for his instruction by Article 1, if the following provisions are observed :—

During the period of the age of obligatory instruction mentioned in Article 3, the head of the school is competent to decline to give effect to such an application whenever it is made for any other than the following reasons :

- (1) On account of the child going to live in another commune, it being proved to the head teacher that this removal has taken place or is about to take place.
- (2) On account of an intention to place the child at another school, it being proved to the head teacher that such a change will be effected within a fortnight.
- (3) On account of an intention to give the child home instruction, it being proved to the head teacher that the provisions of Article 4 are, or will be, complied with.
- (4) On account of one of the exemptions mentioned in Article 7, it being proved to the head teacher that the provisions of Articles 9 and 10 are complied with.

In the cases mentioned, under 1 to 3 inclusive in the preceding paragraph of this Article, the head teacher is competent to give a written permission, for not more than a fortnight, for the child to be absent from the school, and to defer the removal of the child's name from the list of pupils until it is proved to him that the child is living in another commune, or that it is placed at another school, or that it is receiving home instruction and that the provisions of Article 4 are complied with.

The head teacher of a public primary school is not competent to remove the name of a child from the list of pupils during the period assigned for instruction described in Article 3 for other reasons than one of those mentioned in the second paragraph of this Article under 1 to 4 inclusive, except with the consent of the arrondissement school inspector.

A child that is officially inscribed according to Article 20, Section 4, must not have its name erased from the list of pupils without the consent of the arrondissement school inspector during the first six months after it is placed in the school, except in the cases mentioned in the second paragraph of this Article under 1, 2, and 3.

ARTICLE 12.

Valid reasons for temporary non-attendance at school are :—

- (1) Temporary closing of the school or suspension of the instruction.
- (2) A legal order prohibiting for a time attendance at the school.
- (3) Temporary dismissal from the school as a disciplinary measure.
- (4) Permission for temporary non-attendance at the school in behalf of work in or for the occupation of agriculture, gardening, tending cattle, or turf-digging, granted by the school inspector on the grounds of Article 13.
- (5) Indisposition of the child, performance of religious duties, or other important circumstances, which can be considered as valid reasons.

ARTICLE 13.

The arrondissement school inspector may grant a temporary exemption from attendance at school in behalf of work in or for the occupation of agriculture, gardening, tending cattle, or turf-digging, to children who, in the last six months preceding the application, have regularly attended school, for not more than six weeks annually, not reckoning the vacations. This exemption may be withdrawn by the school inspector on account of irregular school-attendance occurring subsequently to the application.

Notice shall be immediately given to the person interested of the decision of the arrondissement school inspector. In cases of refusal the reasons shall be given.

Parents, guardians, or other responsible persons mentioned in Article 1, may make an appeal to the district school inspector within a fortnight after the refusal is brought to their knowledge.

Notice of the permissions granted shall be given at once to the head teacher of the school in which the children are inscribed. The Minister charged with carrying out the law for regulating primary instruction shall decide in what manner notice of the permission shall be given to the inspector and to the other authorities concerned.

The inspector shall send every year before 1st February to the Minister charged with carrying out the law for regulating primary instruction a return of the number of permissions granted during the preceding year in each arrondissement, with the period for which they were granted.

ARTICLE 14.

The permissions mentioned in the preceding Article shall be refused only—

- (1) On the ground of irregular school attendance during the last six months preceding the application.
- (2) If there are substantial reasons for suspecting that no use will be made of the permission for the object described in the first paragraph of Article 13.
- (3) If the child has not yet attained the age of ten years.

ARTICLE 15.

The Communal Council is competent as regards the entire commune or certain portions of the commune to issue orders for regulating the period or the periods within which, exclusive of the other parts of the year, the permissions, mentioned in the first paragraph of Article 13, may be granted.

The arrondissement school inspector shall be consulted about every proposal for that end, before it is introduced for discussion in the Council.

ARTICLE 16.

The head teacher of the school is authorised to give the pupils permission in writing to be absent from the school for a time :

- (1) For an indefinite time on account of the indisposition of the child :
- (2) For a definite time for one of the other reasons mentioned under 5 in Article 12.

The permission mentioned under 2, if it is granted to the same child for more than ten school attendances in twenty-eight days, requires the confirmation of the arrondissement school inspector.

If the head teacher considers a non-attendance at school for which he has not granted permission legalised or excusable for one of the reasons mentioned in Article 12, he shall give notice thereof to the arrondissement school inspector, according to the provisions of Article 19.

A non-attendance at school, concerning which a communication with reasons assigned has not been received by the head teacher within eight days, shall not be registered by him as excusable.

ARTICLE 17.

The arrondissement school inspector is authorised, as regards a non-attendance for which no permission was granted according to Article 16, to excuse it or declare it allowed by law for one of the reasons mentioned in Article 12.

The arrondissement school inspector shall enter in a register the cases, in which non-attendance at the school was for a time permitted, and those in which he excused the non-attendance or declared it allowed by law, giving the reasons which induced him so to act.

Instructions shall be issued by Us concerning the form of the register aforesaid and the manner in which either in its entirety or in extracts it shall be communicated to the authorities to be indicated by Us.

ARTICLE 18.

Every year before 15th January the burgomaster and aldermen shall draw up in duplicate an alphabetical list of the children living in the commune on the first day of the month of January, and who in the course of that year have attained or shall complete the age of seven to thirteen years.

The list shall contain the surnames of the children, with the Christian names, the sex, date of birth, and place where they reside.

Provided the instructions of the second paragraph of this Article be duly observed those children of the age aforesaid shall always be included in the list who in the course of the year come to settle in the commune, who reside there in the sense of Article 8, who leave the commune, or who change their place of residence within the commune, or who die.

One of the duplicates of the list shall be sent to the arrondissement school inspector before 1st February, to whom also within a fortnight from the termination of every month notice shall be given of the entries made during that month, described in the preceding paragraph.

If the commune belongs to the jurisdiction of more than one arrondissement school inspector, more than two copies, as they are required, shall be made of the list which is then drawn up according to arrondissement, and one copy shall be sent to each arrondissement school inspector together with notice of all the entries made in it.

ARTICLE 19.

Every year before 22nd January the heads of the public and private primary schools shall make up in duplicate an alphabetical list of the children attending their school on the fifteenth day of that month, with separate mention of those children who no longer come under the provisions of Articles 3 and 5.

This list shall contain the surnames of the children, the Christian names, the sex, the date of birth and place of abode, and, in case of official inscription, a note of this circumstance also. If the place of abode is situated in an arrondissement other than that to which the school belongs, mention shall be made of this fact on the list.

A note shall always be kept on the list of the admission of the children and of the erasure of their names, as also of the reasons which led to the erasure; furthermore of every non-attendance, with mention of the reasons

that led to that non-attendance, of every permission granted according to Article 16, and of every non-attendance which the head teacher of the school, according to the last paragraph but one of Article 16, considers excusable or allowed by the law.

The duplicate of the list shall be sent to the *arrondissement* school inspector before 1st February, to whom also every week notice shall be given of the entries described in the preceding paragraph, which have been made in the week just expired.

These notices shall be given in writing, and whenever they relate to the non-attendance of a pupil in a class other than that in which the head teacher of the school gives instruction, shall be signed also by the teacher of that class.

The school inspector is bound to warn the head teachers of the schools, in case where they do not send in or send in only incomplete lists and notices, to fulfil their obligation within a date to be fixed by him.

ARTICLE 20.

1. As soon as the *arrondissement* school inspector has received the lists mentioned in Articles 18 and 19, as also the notices and returns mentioned in Articles 4 and 9, he shall make a note of those children of the age for instruction assigned in Articles 3 and 4 who have not been placed in a primary school nor have been proposed for one, and who are receiving no home instruction.

If he ascertains on inquiry that as regards a child mentioned in the first part of this paragraph there is no ground of exemption according to Article 7, he shall by letter warn the person responsible by Article 1 to fulfil as soon as possible the obligation laid upon him by the law.

2. If the *arrondissement* school inspector finds that the warning mentioned in the preceding paragraph has not been attended to after a fortnight, he shall give notice as quickly as possible to the Commissions for preventing non-attendance at school.

Within eight days from the receipt of the notice mentioned in the first part of this paragraph the person responsible by Article 1 shall be summoned in writing by the Commission aforesaid.

At least eight clear days must elapse between the summons and the day appointed for the appearance of the person summoned.

The person responsible by Article 1, on appearing before the Commission, shall have his obligation pointed out to him, and shall be solemnly warned against continuing to offend.

If the person summoned does not appear, a similar warning in writing shall be sent to him.

The *arrondissement* school inspector shall receive at once notice of the warning and of the date of it.

3. If the *arrondissement* school inspector finds that the offence, described in Article 1 and Article 6, 1, is still being committed, after a fortnight has elapsed since the warning mentioned in the preceding paragraph was sent to the offender, he shall announce to him in writing that the child will be inscribed as a pupil in a primary school by the authorities, that therewith the administrative treatment of his offence is closed, and that in case of his neglecting his obligation to assure regular attendance at school, he will be prosecuted for the offence in a criminal court.

4. At the same time he shall give notice of the announcement mentioned in the preceding paragraph to the Commission for preventing non-attendance at school, and the Commission, on the receipt of this notice, shall take measures as soon as possible for the child to be inscribed by authority as a pupil in a primary school. In choosing the school as much regard as possible shall be paid to the wishes of the person interested, if he expresses any.

Notice shall be given of this inscription by authority to the *arrondissement* school inspector and to the person responsible by Article 1, and it shall include the name of the school and the date when the child is placed as a pupil.

As regards a child which is inscribed in a school by authority, the existing regulation for the levying of school-money is in force.

ARTICLE 21.

1. If the arrondissement school inspector finds, on examining the lists and notices sent him, that a pupil has not regularly attended school, while no permission of absence has been given and no other reason justifies or excuses the neglect, he shall by letter warn the person responsible according to Article 1 as soon as possible to fulfil in future the obligations laid upon him by the law.

2. If the arrondissement school inspector finds that the offence described in Article 1 and Article 6, 2, is repeated within six months after the warning mentioned in the preceding paragraph has been brought to the knowledge of the person responsible by Article 1, he shall give information to the Commission for preventing non-attendance at school, as soon as possible after the repetition of the offence is proved to him.

Within eight days from the receipt of the notice mentioned in the first part of this paragraph the person responsible by Article 1 shall be summoned in writing by the Commission for preventing non-attendance at school.

At least eight free days must elapse between the summons and the day appointed for the appearance of the responsible person.

The person responsible according to Article 1, on appearing before the Commission, shall be reminded of his obligation and solemnly warned against a repetition of his neglect.

If the person summoned does not appear, the person responsible by Article 1 shall at once be reminded of his obligation and solemnly warned in some other way, considered most desirable by them, against a repetition of his neglect by the Commission for preventing non-attendance at school.

The arrondissement school inspector shall receive immediate notice of the day on which the warning, in accordance with the fourth or fifth part of this paragraph, was given.

3. If the arrondissement school inspector finds that the violation of Article 1 and Article 6, 2, is repeated within six months after the warning mentioned in the preceding paragraph was given, he shall send the person responsible by Article 1 a written notice, that the administrative treatment of his offences, with reference to the child whose name is given in the notice, is closed, that he is reminded, as a fresh offence has been committed by him, that this offence will not yet be followed by a criminal prosecution, but that in the case of the next offence committed within six months, and of further offences subsequently, a *procès-verbal* will be drawn up.

Instructions shall be issued as to the manner of serving the notice mentioned in this paragraph on the responsible person by a general measure of administration.

4. If the arrondissement school inspector finds that the offence described in Article 1 and Article 6, 2, has been committed as regards the same child within six months after the notice mentioned in the preceding paragraph was sent to the offender, he shall transmit a *procès-verbal* of this offence and of subsequent offences, and of the notice mentioned in the preceding paragraph, to the official of the authorised Government Department. And he shall also state therein the reasons of the irregular school attendance, so far as they are known to him.

5. If six months have elapsed, since the notice mentioned in Section 3, without a fresh offence having been committed by the same person about the same child, proceedings shall be taken over again according to Sections 1 to 3 incl. of this article in case of a subsequent offence.

If a year has expired without a fresh offence having been committed by the same person in connection with the same child, since the commission of an offence, on which a sentence without appeal has been passed, or since the person convicted willingly paid the fine, proceedings shall be taken afresh as provided in the preceding part of this paragraph in the case of a subsequent offence.

6. The administrative measures described in Sections 1 to 3 incl. of this article, are not applicable to an offence mentioned in Article 1 and Article 6, 2, committed with reference to a child which has been inscribed by

authority as a pupil of a primary school, within six months from the day when that child was considered to belong to the children attending the school.

With regard to such an offence the arrondissement school inspector shall at once transmit a *procès-verbal* to the Public Prosecutor, adding an extract from the lists and notices mentioned in Article 19, so far as they relate to the case.

ARTICLE 22.

The communal council shall appoint one or more commissions to assist the arrondissement school inspector to perform the duties mentioned in Articles 20 and 21.

These commissions shall be appointed from among :

- (1) Parents, guardians, and other persons living in the commune responsible for the children in the commune inscribed in a primary school ;
- (2) Teachers of full age who are employed at a public primary school in the commune ;
- (3) Teachers of full age who are employed at a private primary school in the commune ;
- (4) Other inhabitants of the commune, who are of full age, and who are not included in one of the preceding classes.

All the persons in the classes 1 to 4, incl., shall, as far as possible, be represented in every commission.

These commissions shall be known by the name of "Commissions for preventing non-attendance at school."

If more than one commission is chosen in a commune every commission shall be appointed for a specifically indicated portion of the commune.

The communal council shall fix the number of the members of the commission or commissions to be instituted in the commune, but be it understood that the number of members in one commission shall never exceed nine.

The members shall be appointed for the term of three years. The retiring members are eligible for re-appointment.

If the communal council has appointed no commission for preventing non-attendance at school within three months after the date of this law coming into operation, or has not filled up a vacancy in the commission within three months, the appointment or filling up of the commission shall be made by Our civil governor in the Province.

The sphere of action of these commissions shall be regulated by general administrative measures.

If the commission fails to fulfil the duties assigned to it, the burgomaster and aldermen shall take its place and fulfil those duties, according to rules to be enacted by general measures of administration.

ARTICLE 23.

1. Parents, guardians, and other responsible persons mentioned in Article 1 who commit an offence described in Article 1 and Article 6, shall be punished with a fine not exceeding fifteen florins in any one of the following cases :

- (1) If the offence relates to a child which has been inscribed by authority as a pupil in a primary school, and the offence was committed within six months from the day when the child was considered to belong to the school ;
- (2) If the notice mentioned in Article 21, Section 3, was sent to the offender, and if the offence concerns the child to whom the notice refers, and was committed within six months after the notice was sent to the offender ;

(3) If the offender was previously convicted without right of appeal by 1 or 2 of this paragraph or willingly paid the fine, and the offence was committed within one year after the offence which led to the conviction, and relates to the same child;

(4) If the offender was previously convicted without right of appeal by 3 of this paragraph or willingly paid the fine, and the later offence was committed within one year after that which led to the conviction, and relates to the same child.

2. If at the date of the commission of the offence six months have not elapsed since a former conviction of the defendant without right of appeal, in reference to the same child for one of the offences mentioned in the first paragraph of this article or since the convicted person willingly paid the fine, he shall be punished with a fine not exceeding fifty florins.

In the case of a second or third repetition, committed in regard to the same child, also within six months after the last conviction without right of appeal or since the convicted person willingly paid the fine, imprisonment not exceeding seven days may be inflicted instead of the fine.

ARTICLE 24.

Head teachers who do not attend to the warning mentioned in the last paragraph of Article 19, shall be punished with a fine not exceeding fifteen florins.

If at the date of the commission of this offence a year has not yet elapsed since a previous conviction of the offender without right of appeal for an offence mentioned in the first paragraph of this article or since the convicted person willingly paid the fine, he shall be punished with a fine not exceeding fifty florins.

On a second or third repetition, committed also within a year from the date of the last conviction without right of appeal, or since the offender willingly paid the fine, a fine not exceeding one hundred florins shall be inflicted.

ARTICLE 25.

The arrondissement school inspector is empowered to ask parents, guardians, and other responsible persons mentioned in Article 1, who fulfil their obligation mentioned in Article 1 by affording home instruction, for information in writing of the time during which the children receive primary home instruction in the various subjects. The person responsible by Article 1 is bound to furnish that information. The arrondissement school inspector is empowered to request to be admitted to the lessons.

He is empowered to call up the children mentioned in the first paragraph once in the year, in order to ascertain if adequate instruction is given in the subjects which that instruction ought to embrace. The person responsible by Article 1 is bound to take care that the summons is obeyed.

At least ten clear days must intervene between the summons and the day appointed for the examination.

If the instruction proves to be unsatisfactory, the arrondissement school inspector shall warn the person responsible by Article 1 to adequately improve it within three months, and the latter is bound to obey that warning.

The arrondissement school inspector must make use of the powers conferred on him in this article only when there is a well-grounded reason for serious doubt that the obligation to give instruction is strictly fulfilled.

Whenever parents, guardians, or other responsible persons do not furnish the required information mentioned in the first paragraph of this article, or whenever children are not submitted by parents, guardians, or other responsible persons to the examination by the arrondissement school inspector as prescribed, as also whenever, in a second examination at the end of the period mentioned in the third paragraph, no satisfactory improvement is shown, the arrondissement school inspector, unless the

reasons for it seem to him to justify or excuse it, shall send a *procès-verbal* on the subject to the authorised official of the Government Department.

The provisions of this article are also applicable to pupils of private schools, where less than sixteen hours per week of instruction is given in the subjects mentioned under *a-h* in Article 2 of the law for regulating primary instruction.

Instructions for the carrying out of this Article shall be given in general measures of administration.

ARTICLE 26.

The penalties in Article 23 are applicable to parents, guardians, or other responsible persons mentioned in Article 1, who are guilty of an offence against one of the regulations in Article 25.

ARTICLE 27.

The cognisance of the offences, mentioned in Article 23, taken in connection with Articles 1 and 6, belongs to the province of the district judge within whose jurisdiction the primary school to which the child belongs is situated. The cognisance of the offences mentioned in article 26 lies within the province of the district judge, within whose jurisdiction is situated (a) the home of the responsible person, if the child lives with that person; (b) the institution under the control of the responsible person, if the child is in that institution.

ARTICLE 28.

The declaration made by the *arrondissement* school inspector on his official oath to the effect that it is proved from the lists, the observations, and the information drawn up according to Article 19 which have been handed to him, that a child has been placed in a primary school, that a child has been inscribed by authority, and that a child on the days and in the school hours set down in that declaration, apart from the cases mentioned in the second paragraph of Article 2, has not attended the school, shall be held to furnish a complete proof of each of these circumstances, so far as the above facts are not contradicted.

The declaration made by the *arrondissement* school inspector on his official oath:—

1. That parents, guardians, or other responsible persons mentioned in Article 1 have not, on his application, furnished him with the information mentioned in the first paragraph of Article 25.
2. That parents, guardians, or other responsible persons mentioned in Article 1 have not submitted a child to the examination prescribed by the second, sixth, or seventh paragraph of Article 25.
3. That no satisfactory improvement has been shown at a second examination, according to the sixth paragraph of Article 25, shall be held to furnish a complete proof of each of these circumstances.

ARTICLE 29.

The communal council is empowered to issue an order that, under conditions to be detailed in that order, police officers shall be empowered to bring a child, whom they find on the public road during school hours to the head teacher of the school to which the child belongs.

ARTICLE 30.

The declarations, the lists, and the information mentioned in Articles 10, 18, and 19, shall be drawn up in forms to be approved by the Minister charged with carrying out the law for regulating primary instruction.

ARTICLE 31.

The forms of the declarations mentioned in Articles 4 and 10, as also the blank lists and the forms of the information tables mentioned in Article 19, may be obtained free of charge at the office of the secretary of the commune, and, together with the lists mentioned in Article 18, shall be furnished by the State, free of expense, to the communal authorities.

ARTICLE 32.

The acts made punishable by this law shall be considered as criminal offences.

ARTICLE 33.

All printed petitions drawn up in accordance with this law are free from stamp duty and from the formality of registration; the issue of these documents is free of charge.

Notices, declarations, applications, and petitions, mentioned in Articles 4, 9, 10, and 13, with due observance of the instructions to be given by Us, may be sent free of postage by the persons concerned. Free postage shall also be granted for sending to persons concerned the information of permissions, arrangements, warnings, summonses, etc., mentioned in Articles 10, 13, 16, 20, 21, and 25.

TITLE II.

Instruction in Continuation Schools.

ARTICLE 34.

Opportunities of instruction in a Continuation School shall be afforded to those persons who have received the usual primary instruction.

The Continuation School course may also be extended to subjects not comprised in primary instruction.

The communal council, after consultation with the district school inspector, and after receiving information from the head teacher or head teachers of the primary schools, shall regulate the curriculum of the Continuation School and the manner in which instruction shall be given, according to local requirements, and with due observance of the following regulations:

1. That it must be given for at least ninety-six hours in the year.
2. That it must include at least four subjects of instruction, among which two at least are comprised in the usual school instruction.
3. That it must be so arranged that parents who do not wish their children to receive more than 96 hours of repetition-instruction in the year, may be able to send them to a regular course, without exceeding this number of hours.
4. That, excepting always temporary exemption for certain communes or parts of communes to be allowed by Us, opportunity must be afforded for girls, whether they take part in the lessons with boys or not, of receiving Continuation School instruction for 96 hours in the year apart from the hours in the evening.
5. That not more than two half-days in the week must be devoted to this instruction, apart from the hours in the evening.
6. That during the hours assigned for this instruction in the rooms selected for that purpose, the usual primary instruction shall not be given to the classes of the primary school which are instructed in those rooms.

A lesson hour, beginning at 5 o'clock in the afternoon, or later, shall be considered as belonging to the evening hours.

Article 18 and Article 19, *b*, are applicable to this case.

TITLE III.

Final and temporary provisions.

ARTICLE 35.

For the furtherance of attendance at school the communal council is empowered to supply food and clothing to school children who stand in need of them, or to grant a subsidy for that object, in both cases according to regulations to be made by general measures of administration.

Children who attend the public schools and children who attend private schools, as mentioned in the first paragraph of Article 2 of this law, shall be treated in the same manner.

ARTICLE 36.

As regards children for whom permission shall be asked, in accordance with the provisions of Article 13, within six months from the date of this law coming into operation, the period of six months, mentioned in the first paragraph of Article 13, shall be replaced by the shorter period which has elapsed between the date of this law coming into operation and the day of the application.

ARTICLE 37.

This law may be cited under the title of the "Compulsory Education Law."

ARTICLE 38.

This law shall come into operation at a date to be subsequently fixed by Us.

On the coming into operation of this law the Articles 80 and 81 of the law for regulating primary instruction cease to be in force.

We order and direct that this law shall be inserted in the *Staatsblad*, and that all Ministerial Departments, Authorities, Boards, and Civil Functionaries, whom it may concern, shall co-operate to the strict carrying out of the same. Given at Soestdijk, the 7th July, 1900.

(Signed) WILHELMINA.

(Contersigned)

H. GOEMAN BORGESIUŠ,

Minister of the Interior.

Published on the Eighteenth of July, 1900.

(Signed) COET V. D. LINDEN,
Minister of Justice.

B.—THE PRIMARY INSTRUCTION LAW OF 1889.

(Staatsblad No. 175.) Law of the 8th December 1889, for the partial amendment of the Law of 17 August 1878 (Staatsblad No. 127) for the regulation of primary instruction.

We William III., by the Grace of God, King of the Netherlands, Prince of Orange-Nassau, Grand Duke of Luxemburg, etc., etc., etc.

To all who shall see this or hear this read, greeting !

We proclaim that we, taking into consideration that it is desirable partially to revise the law of 17 August, 1878 (Staatsblad No. 127), for the regulation of primary instruction, as amended by the laws of 27 July 1882 (Staatsblad No. 117), 3 January 1884 (Staatsblad No. 2), 11 July 1884 (Staatsblad No. 123), and 15 April 1886 (Staatsblad No. 64) ;

Having attended to Our Council of State and by common consent of the States-General, do hereby approve the following :

ARTICLE I.

Clauses 2, 3, 8, 9, 12, 14, 15, 16, 19, 24, 28, 32, second section, 39, 45, 46, 48, 56, 57*b*, 60, 61, 63, last section, 65, 65 *bis*, 73 and 85, last section, of the law of 17 August 1878, shall read as follows :

Clause 2.—This law includes, among the subjects of primary education instruction in :

- a. Reading.
- b. Writing.
- c. Arithmetic.
- d. The elements of the Dutch language.
- e. The elements of the history of Holland.
- f. The elements of geography.
- g. The elements of natural history.
- h. Singing.
- i. First exercises in drawing.
- j. Gymnastic exercises, independent, or in form of drill.
- k. Useful manual work for girls.

Besides the above, instruction can also be given in primary schools in—

- l. The elements of the French language.
- m. The elements of the German language.
- n. The elements of the English language.
- o. The elements of universal history.
- p. The elements of science.
- q. Drawing.
- r. The elements of agriculture.
- s. Gymnastics.
- t. Fancy manual work for girls.

Clause 3.—The primary schools established and supported by the State or by communes are public schools, the others are private schools. No provision is made by the waterway departments* to provinces on behalf

* Dutch "*waterschappen*," adapted French "*wateringues*."

of primary instruction. No contributions of money nor any other support may be given by the communes either directly or indirectly to private schools or private institutions for the training of teachers, except in the cases and under the conditions set forth in this law.

Clause 8.—Young persons of both sexes may be admitted into the school as pupil-teachers, provided they—

- a. Have attained their fifteenth year and not exceeded their nineteenth, or hold the certificate referred to in Clause 56, under a.
- b. Are engaged in no work in the school other than that in which they are occupied under the supervision and guidance of a competent person present in the same school-room; and
- c. After having been appointed pupil-teachers for three months, are in possession of a testimonial approved in writing by the school inspector of the arrondissement, not less recent than one year, and issued and signed by the head teacher of the school which they were attending at the time of such issue, stating that their moral conduct and their progress are satisfactory.

In the event of the school inspector of the arrondissement withholding his approval, the head teacher of the school may within a fortnight after such refusal appeal for a decision to the district school inspector. This latter gives his decision within a month.

The head teacher of the school gives a written notice, at least three days in advance, of the admission of a pupil-teacher into his school, to the school inspector of the arrondissement.

Clause 9.—Whosoever shall, in opposition to the rules laid down in Clause 5 (1878), give instruction in premises not approved of, or who as head teacher of a school admits more pupils into a class-room than it may hold by the regulations set forth in that Clause or who admits thereto pupil-teachers without previously having dispatched the requisite written notification, or otherwise than in the manner stated in Clause 8, is punished by a fine not exceeding fifty florins (gulden).

If at the time the offence was committed two years have not elapsed since a previous sentence without appeal was pronounced on the offender for a similar offence, he is punished by a fine not exceeding one hundred florins or by imprisonment for a term not exceeding a fortnight. On a second or subsequent repetition of the offence committed within two years after the last sentence without appeal was pronounced, a punishment of at least one year's imprisonment is inflicted.

Clause 12.—Normal schools and courses of instruction for the training of teachers are established and supported by the State.

The establishment of them is regulated by general measures of administration.

A State contribution can be granted on behalf of the training of teachers:—

1. To communal or private normal schools;
2. To normal school teachers and head teachers for each of the persons trained by them, who have obtained the certificate referred to in Clause 56, according to the rules and conditions to be made by Us by general measures of administration.

Regulations a and c of Clause 8 and those of Clause 9, so far as they relate to the admission of pupil-teachers, do not apply to the practice schools which are attached to the normal schools indicated by Us.

Clause 14.— Excepting the cases provided for in Clause 19 under a, b, c, d and f, an appeal may be made to Us against every resolution taken in virtue of this law by the Deputations* by any person interested in the supervision or amendment of the resolutions of the Deputation.

* "*Gedeputeerde Staten*," *Etats Députés* or *Députations Permanentes*, the official body to which all communal accounts are paid in each Province.

The appeal must be lodged within thirty days, counting from the day whereon the resolution was published or forwarded to the party concerned.

Clause 15.—This law is not applicable to—

- a.* Any person who gives special instruction exclusively in one or more of the subjects stated in Clause 2, under *h, i, k, q, r, and t.*
- b.* Those schools exclusively intended for instruction in one or more of the subjects stated in Clause 2, under *h, i, j, k, q, r, s, and t.*

Clause 16.—In every commune sufficient primary instruction shall be given in an adequate number of schools, which shall be accessible to all children without any distinction of creed.

The instruction embraces the subjects enumerated in Clause 2, *a-k*, and when sufficient need of extension exists, one or more or even all subjects mentioned in that clause under *l-t.*

The children admitted to the school are obliged in each class to take part in all the branches of instruction taught therein, excepting the subjects mentioned in Clause 2, under *j* and *s.*

Adjoining communes may . . . combine in the foundation and maintenance of joint schools, or in the drawing up of regulations concerning the admission of children from the one commune to the schools of the other.

Clause 19.—The resolutions of the Communal Council concerning—

- a.* The place where school premises shall be erected ;
- b.* The diminution of the number of schools or of the scope of the instruction ;
- c.* The amalgamation of a school with, or its substitution for, another school ;
- d.* The closing of a school or the suspension of instruction in a school ;
- e.* The age which children must have attained before they are admitted to the public school and the age at which they must quit the school ; and
- f.* The dismissal of teachers

are submitted to the approval of the Deputation.

Clause 24.—The head teacher of the school is assisted by at least one teacher, as soon as the number of children attending the school exceeds forty, and by at least two teachers as soon as the number amounts to ninety-one.

An additional teacher is required for every twenty-five children in attendance.

When, including the head teacher of the school, the number of teachers attached to the school according to the aforesaid regulations of this clause shall exceed four, two of them at least, or if the number exceeds eight, three at least, must have attained the age of twenty-three, and must possess the rank of head teacher.

Among the teachers mentioned in this clause, those who give instruction exclusively in one or more of the subjects named in Clause 2 under *h-t* are not included.

More than 600 children may not be admitted simultaneously to any school, unless permission be granted by Us for special reasons.

The application of this clause is based upon the number of children who are recognised as pupils actually in attendance on the fifteenth day of the month of January in the current school year.

When this basis cannot be taken owing to the date when the school was established, the number of pupils who were recognised as actually in attendance on the last day of the month following that on which the school was opened, shall be substituted,

Clause 28.—The teachers attached to the communal schools are nominated by the communal council.

The nomination of the teacher placed at the head of the school is made by a committee of at least three authorised persons, including the Burgomaster and Aldermen and the district school inspector.

Should the Burgomaster and Aldermen and the school inspector be unable to agree (on a selection), a comparative examination of the qualifications of the candidates must precede the nomination. Should more than six competent persons present themselves for examination, the Burgomaster and Aldermen, in consultation with the district school inspector, may determine what candidates shall compete, provided that they be not less than six. In the event of disagreement respecting the choice of the persons to be examined, all those candidates who presented themselves for examination shall be admitted to it.

In the event of the nomination taking place after the said competitive examination, a report furnished by at least three competent persons shall be drawn up by the district school inspector and forwarded to the council, together with a written explanatory recommendation regarding the candidates. Everything which further concerns the examination mentioned in this clause, is settled by Us by general measures of administration.

In communes where there are more schools than one the teacher who is placed at the head of the one can be placed at the head of the other, without any report, if the municipal council agree thereto after consulting the district school inspector. The nomination of other teachers must be based upon a report of at least three competent persons, including the Burgomaster and Aldermen in conference with the school inspector of the arrondissement, after receipt of the report of the head teacher of the school to which the nomination is to be made. The head teacher's report and the written explanatory recommendation of the arrondissement inspector are laid before the communal council.

Teachers attached to schools which are supported exclusively by the State are nominated by Our Minister who is charged with the administration of this law.

Clause 32, second section.—If in the case of a head teacher no provision is made by the communal council to fill the post within six months of its becoming vacant, the appointment is made by the Deputation after a preliminary examination into the qualifications of the candidates.

Clause 39.—A head teacher or an ordinary teacher who is discharged owing to the suppression of the school, or owing to the abolition of his post because the number of teachers exceeds that prescribed by law (provided he has not reached the period when he is entitled to a pension), shall receive an interim salary* to be granted by the State amounting to one-half the annual salary which he was receiving at the time of his discharge. This interim salary expires in five years in the case of a head teacher and in two years in the case of an ordinary teacher, or when the head teacher or ordinary teacher becomes entitled to a pension, or as soon as he is nominated to any Government, provincial, or communal post, the salary of which equals or exceeds the amount of this interim salary, or accepts any appointment not offered by the State, province, or commune. Upon his accepting an appointment not offered by the State, province, or commune, the income of which is less than the interim salary, this latter is decreased by the deduction of the amount of that income.

Except in the last-named case, the time during which such interim salary has been received is reckoned in the claim for pensions.

One-half of the interim salary granted to ordinary teachers, but no part of that granted to head teachers of schools, is refunded to the State by the commune.

* Dutch, *wachtgeld*; French, *traitement d'attente*.

(The above clause does not apply to teachers in public schools who are exclusively entrusted with instruction in one or more of the subjects named in Clause 2 under *h*, *i*, *k*, *q*, *r* and *t*, nor to teachers in public schools who give instruction exclusively in one of the subjects or in both the subjects named in Clause 2 under *j* and *s*, unless they also give instruction in one or more of the subjects named in Clause 2 under *h*, *i*, *k*, *q*, *r* and *t*.)

Clause 45.—Every year a contribution is given by the State to the commune as follows :—

1 *a*. For every head teacher of a school of ninety pupils and under, two hundred and fifty florins ;

From ninety-one to a hundred and ninety-nine pupils inclusive, three hundred florins ;

From two hundred to three hundred and nine pupils inclusive, four hundred florins ;

From three hundred and ten to four hundred and nineteen pupils inclusive, five hundred florins ;

From four hundred and twenty pupils and upwards, six hundred florins ;

b. For every teacher who assists the head teacher, so far as such assistance is obligatory according to Clause 24, for schools of forty-one to ninety pupils inclusive, one hundred and fifty florins ;

Of ninety-one pupils and above, two hundred florins ; but for each of those teachers who have attained the age of twenty-three and hold the rank of head teacher, so far as such teacher or teachers are required by Clause 24, three hundred florins.

c. If the teaching staff attached to the school exceeds the minimum of teachers fixed by Clause 24 :—

For schools of ninety pupils and under, one hundred and fifty florins, and from ninety-one to three hundred and nine pupils inclusive, two hundred florins for each teacher ;

For schools of three hundred and ten pupils and above, two hundred florins per teacher for at most two teachers ;

But if, in addition to subjects *a*—*k*, the instruction at the same time includes two at least of the subjects mentioned under *l*, *m*, and *n*, and the subject mentioned under *p* of Clause 2 :—

For schools of ninety pupils and under, two hundred florins for one teacher ;

For schools of ninety-one pupils to a hundred and ninety-nine inclusive, two hundred and fifty florins per teacher for at most two teachers.

For schools of two hundred pupils and upwards, two hundred and fifty florins per teacher for at most three teachers.

If a teacher, in the course of the year, has to perform his military service, or is discharged, or dies, the contribution is reckoned according to the scale named under *a*, *b*, and *c*, in proportion to the number of full months during which he has been attached to the school in the course of that year.

2. Twenty-five per cent. of the expenses incurred in erecting, altering, or purchasing school premises, so far as these expenses do not devolve upon others, or are found in other ways.

With regard to the contribution under 1, those schools do not come under its application in which the fees produce an average income of eighty florins and upwards per annum in respect of each pupil.

For the computation of the grant the basis taken is the ratio of the number of pupils to the number of teachers, in accordance with the scale mentioned in Clause 24.

Rules relating to the enforcement of these regulations are given by Us by general measures of administration with due regard to the beginnings, and with the exceptions of the completion, or of the repayment after the expiration of, the year of service for which the payment of this grant was made.

a. Grants are paid in advance as follows :—

To those mentioned under 1 *a* and *b* according to the number of teachers which must be attached to the school by the rules set forth in Clause 24 ;

To those mentioned under 1 *c*, so far as the number of teachers attached to the school on January 1 of the year of service comes into consideration for the contribution ;

b. To those named under 2, in connection with the periods of payment.

Clause 46.—To meet the expenses which are to be defrayed by the commune, a school fee of at least 20 cents. per month must be exacted from every pupil in attendance, with the exception of the indigent, or those who, though not indigent, are in straitened circumstances.* The poorer parent† are only liable for a proportion of the fee when the school fees are alike for every child of the same class.

Exemption from the obligation to levy school fees may be granted to a commune by Us in Council by a decree setting forth the reasons for such exemption. Withdrawal of this exemption is effected in like manner.

The introduction, modification, or abolition of these school fees is effected with . . . this understanding, that Our approval of this payment will not be withheld save by the advice, giving explicit reasons,‡ of the Council of State.

The levying of fees is settled by local statute. . . . The school fees shall amount to no more for any child that can be considered to represent the expense incurred by the commune for the instruction of that child.

Clause 48.—Unless otherwise ordained by a regulation made in virtue of the last section of Clause 16, the school fees exacted from the children from other communes shall not exceed those exacted from the school children resident in the commune which levies the school fees. For two or more children of one family who attend school at the same time, the fees can be reduced below what they would be if reckoned for each child separately.

Clause 56.—Certificates of qualification§ imply :—

a. That the possessor thereof is authorised to impart home and school instruction in the subjects mentioned in Clause 2 under *a-i*. The certificate can at the same time confer competence|| to give home- and school instruction in one or both the subjects named under *j* and *k* in Clause 2 of the law.

b. That the possessor thereof, if he holds also the rank of head teacher, is empowered to give home and school instruction not only in the subjects stated in Clause 2 under *a-i*, but also in those therein specified under *o* and *q*. The certificate can at the same time confer competence to give home and school instruction in one or both subjects specified under *j* and *k* in Clause 2 of the law.

c. That the possessor thereof is thereby made competent to give home instruction, or both home and school instruction in definite branches.

* Dutch *onvermogen*. "Indigent" here represents the Dutch *beduid*.

† *De minvermogenenden*.

‡ *Met redenen omkleed besluit* ; i.e., *avis motivé*.

§ *Akten van bekwaamheid*.

|| *Bevoegdheid verleen*.

Clause 57b.—* . . . examination, for which opportunity shall be offered at least once a year in every province, by a committee composed of the inspector of lower instruction in the province, and four district or arrondissement school inspectors.

Clause 60.—The examination comprises: good reading and writing; analysis of sentences, orthography, and the elements of the Dutch language; skill in expressing oneself correctly and easily, both verbally and in writing; first exercises in drawing; arithmetic, both simple sums and vulgar and decimal fractions, a knowledge of proportion, and the Dutch standard of weights and measures; the elements of geography, especially of Holland and its foreign possessions; the main features of the history of the fatherland; the elements of natural history; the theory of singing; the principles of pedagogy and education.

Upon their admission being ratified, an opportunity is offered to all those who have made application to that effect of furnishing proof of their skill in gymnastics, whether independent or in the form of drill, and to female teachers of furnishing proof of their skill in useful manual work for girls.

Every candidate who passes satisfactorily is furnished free of charge with a certificate of proficiency. In the case of those who have passed their examination in gymnastics, whether independent or in the form of drill, or in useful manual work, or in both branches, a note is made to that effect on their certificate.

Those who hold a certificate for subject *g*, according to Clause 65 *bis*, are exempted from the examination in preliminary drawing.

Clause 61.—To obtain the certificate quoted in Clause 56 under *b*,† the following conditions are required:—

a. Possession of the certificate mentioned in Clause 56*a*.

b. Proof of at least two years' experience as teacher, or (after undergoing the examination mentioned in Clause 56*a*) as pupil teacher in one or more public or private schools for primary instruction, or as teacher in one or more schools for deaf mutes, the blind, dumb, or idiots, the proof thereof to be furnished by the head teacher or teachers of such schools, or proof to be furnished by the manager of one of the training schools for teachers indicated by Us, of having followed at that school for two years the classes preparatory to this examination, after entering for the examination mentioned in Clause 56 under *a*.

c. Entrance for an examination, comprising—except the subjects mentioned in Clause 2 under *a-g*—the subjects named therein under *o* and *q*, and the methods of pedagogy and education.

So far as subject *q* is concerned, those are exempt who possess a certificate of proficiency in this subject in accordance with Clause 65 *bis*.

Clause 63, last section.—A certificate of proficiency will be presented free of charge to every candidate who satisfies the examiners.

The notification referred to in the last section but one of Clause 60 is written across the head teacher's certificate of qualification.

Clause 65.—To obtain a certificate for home and school instruction in one or more of the subjects named in Clause 2, under *l, m, n, p, r,* and *s*, the candidate is required:—

a. To possess the certificate mentioned in Clause 56*a*,

b. To present himself (or herself) for examination before one of the Commissions mentioned in Clause 69 of the law of 2nd May 1863 (Staatsblad No. 50).

Anything which may further concern the examinations referred to in this clause is settled by Us by general measures of administration.

* This refers to the examination for certificates of qualification as "ordinary teacher."

† *I.e.*, the head teacher's certificate.

Clause 65 *bis*.—From time to time opportunity is afforded of obtaining a certificate for home and school instruction in one or more of the subjects mentioned in Clause 2, under *j*, *k*, *g*, and *t*, by an examination before a special commission appointed for this purpose by Our Minister charged with the administration of this law. Everything that concerns the examinations mentioned in this clause is settled by Us by general measures of administration.

Clause 73.—All schools both public and private where primary instruction is given must be always accessible, and upon demand, must be at once thrown open to members of the college of the Burgomaster and Aldermen, to the presidents and members of local commissions of supervision, to the school inspectors of the arrondissement, to the district school inspectors, and to all inspectors within the limits of their jurisdiction. The head teachers of these schools, as well as the ordinary teachers, are bound to furnish the desired information respecting the school and its instruction, either to the persons above-mentioned or to Our Minister, charged with the administration of this law. They are bound to do this in any form, either verbally or in writing, both during school hours and at other times.

Clause 85, last section.—The notification added to the certificate for school instruction, which is given upon satisfactorily passing an examination in one or more of the subjects named under *k-p* of Clause 1 of the law of August 13th 1857 (Staatsblad No. 103) confers the same competence as regards those subjects as is conferred by the special certificates mentioned in Clause 56 under *c*.

The exemption referred to in the last sentence of Clause 61 applies likewise to those in possession of a certificate of proficiency, or of the special mention for the subject mentioned in *o* of Clause 1 of the law of 13th August 1857 (Staatsblad No. 103.) (See below.)

ARTICLE 2.

Clause 54 *bis*.—The State grants to the managers of private primary schools for every year of service a contribution according to the same scale as that which by Clause 45 (1) is granted to the commune on behalf of the public primary schools, provided :—

1. The school is under the management of an institution or responsible society.
2. The instruction includes the subjects named in Clause 2 under *a-i*, as likewise *k*, unless, so far as this last subject is concerned, it appears that the pupils in attendance have received adequate instruction therein elsewhere.
3. That instruction is given during at least eighteen hours per week, of which two hours at most are devoted to the subject mentioned under *k* of Clause 2, in accordance with a time-table which must be submitted to the school inspector of the arrondissement, and hung up in a conspicuous place, and in which the holidays and vacations shall also be set forth.
4. That the number of teachers satisfies the requirements of the public schools as stated in Clause 24, the third section excepted.

Those special schools are not entitled to claim such contributions :—

- a.* In which the number of pupils above six years recognised as actually in attendance amounts to less than twenty-five, according to the standard mentioned in Clause 24.
- b.* In which the school fees produce an average annual income of eighty florins or more in respect of each pupil.
- c.* In which, in case of a vacancy in the teaching staff, a period elapses between the time when the post falls vacant and its acceptance by the nominee longer than six months in the case of the head teacher in charge, or longer than four months in the case of the other ordinary teachers.
- d.* Which appear to be conducted for purposes of profit.

dwellings are submitted before 24th September 1889, to the approval required by Clause 50 of the law of 17th August 1878 (Staatsblad No. 127), so far as that law embodies the law of 11th July 1884, in which case thirty per cent. of the amount of these expenses shall be refunded.

If the grant in aid of teachers' salaries in accordance with the amended law as set forth in Clause 45 of the law of 17th August 1878 (Staatsblad No. 127) amounts to less in any one year for any commune than the sum refunded by the State for the expenses of primary instruction, not including the cost of establishing school premises and teachers' dwellings, and the purchase of necessary school furniture upon the establishment of new premises, to which the commune by virtue of the said clause could lay claim for the year 1889, the State shall refund to the said commune, in lieu of the grant in aid of teachers' salaries above named, the amount which they would have been entitled to claim for that year, according to the terms of the above-named Clauses 45 of the laws of 1878 and 1884, the amount to be refunded by the State towards the expenses of primary instruction, exclusive of the expenses of erecting school premises and teachers' dwellings, and the purchase of necessary school furniture upon the establishment of new premises; yet in no case shall the amount exceed that awarded to it for similar purposes in 1889.

The payment of the amount so refunded is made, taking into account the fixed maximum, and is only designed to make good or pay back certain sums after the settling of the communal accounts, by way of advance on the basis of the approved estimates.

As soon as the regulations of the third section of this clause do not require to be applied to a commune for any year, they cease to have any subsequent force, as far as that commune is concerned.

Clause 54 *bis* shall first be applicable in the year 1890, yet with this understanding, that, if during that year the number of teachers attached to the school does not satisfy the requirements of public schools as stated in Clause 24, the third section excepted, the claim to the Government grant for those teachers shall not be thereby forfeited. During the years 1891 to 1898 inclusive the claim to Government aid will only be forfeited for non-compliance with the terms of 54 *bis* (4), if the private schools do not comply with Clause 23 as regards the teaching staff, or so far as Clause 24 is concerned, do not comply with the rules to be framed by Us. In any deviation from the regulations of the last section but one of Clause 24, so far as that clause is amended by this law, the application of Clause 24 for the year 1890, to the private primary schools existing when this law came into force, and which are entitled to the Government grant named in Clause 54 *bis*, shall be based upon the number of children who on 31st December 1889 were recognised as actually in attendance.

The number of teachers attached to the communal schools when this law comes into force shall not be decreased, except so far as the number required by Clause 24, as amended by this law, may have been exceeded.

Instructions respecting the administration of this clause are given by Us by general measures of administration.

ARTICLE 6.

Instruction commanded by this law in the subject named in Clause 2 under *j*, becomes obligatory on 1st January 1893.

During the six years following this period exemption from the obligation of imparting this instruction may be granted by Us to certain schools in each case for at most two years.

Those who have given instruction in the subject named in Clause 2 under *s* before or on 1st September 1889, according to Clause 15*a* may continue to give instruction in that subject upon the same standing as they have been in the habit of doing.

Those who before this law comes into force have obtained the certificate named in Clause 56 under *a* or *b*, or who are possessed of other equivalent certificates or licences, are exempted from the examination fee prescribed in Clause 65 *ter*, upon going up for examination in subject *j* mentioned in Clause 65 *bis*.

ARTICLE 7.

Grants at present enjoyed in virtue of Clause 3, third section,* of the law of 17th August 1878 (Staatsblad No. 127), may still be granted after this law comes into force, though they shall not be increased in amount or granted under any other conditions.

Other grants which are made by communes under the law of 17th August 1878 (Staatsblad No. 127), but which can no longer be made after this present law comes into force, may be paid for five years after that period, provided they be not increased in amount nor given under new conditions.

ARTICLE 8.

Female teachers who have obtained the certificate named in Clause 56 (*a*) of the law of 17th August 1878 (Staatsblad No. 127), or who are mentioned under *b* of that clause of the law in force before this present law comes into force, or who hold equivalent certificates or licences placed on the same level therewith, retain their authority to give home and school instruction in the subject named under *k* in Clause 2 of that law, within the district in which they possessed that authority.

All those who have obtained the certificate mentioned in Clause 56 (*b*) of the law of 17th August 1878 (Staatsblad No. 127), before this present law comes into force, or who are in possession of the certificates or licences placed on the same level therewith, retain their authority to give home and school instruction in the subject named under *p* in Clause 2 of that law, within the district in which they possessed that authority.

The certificate mentioned in Clause 56 (*a*) of the law of 17th August 1878 (Staatsblad No. 127), obtained before this law comes into force, confers equal authority to give home and school instruction in the first elements of drawing, as the certificate named in Clause 56 (*a*), as amended by this law.

ARTICLE 9.

The existing regulations as to the examinations for obtaining the certificate of proficiency referred to in Clause 56 (*a*) and (*b*), and as to the competitive examinations, remain in force until those subjects shall be reorganised in agreement with this law, though not after the 1st January 1891, and with this understanding, that the regulations in Clause 65 *ter* shall be in force for all the examinations named in that clause, from the period when this present law comes into force.

* This refers to the communal grants made to private schools conditionally upon their severing all denominational connection.

ARTICLE 10.

This law comes into force on 1st January 1890.

We charge and command that this shall be placed in the *Staatsblad*, and that all Ministerial Departments, Authorities, Colleges, and Officials concerned therein shall apply themselves to its strict enforcement.

Given at The Loo, on the 8th of December 1889.

WILLIAM.

The Minister of the Interior,
MACKAY.

Published on the eleventh day of December, 1889.

The Minister of Justice,
RUYS VAN BIRRENBROCK.

SUPPLEMENT TO THE LAW OF 1889.

(*Staatsblad* No. 189). Decree of 23rd December 1889, containing instructions for the administration of Clause 5, 2nd section of the law of 8 December 1889 (*Staatsblad* No. 175) for partial amendment of the law relating to primary instruction.

We William III., by the Grace of God, King of the Netherlands, Prince of Orange-Nassau, Grand Duke of Luxemburg, etc., etc., etc.

On the report of Our Minister of the Interior of 10th December 1889, (B) Department of General Affairs and Accounts ;

Considering that the necessary instructions must be given by Us for the administration of Clause 5, 2nd section of the law of 8th December 1889 (*Staatsblad* No. 175) for a partial revision of the law regulating primary instruction ;

Having listened to Our State Council (opinion of 20th December 1889, No. 5) ;

And having seen the later report of our aforesaid Minister, of 21st December 1889, No. 6378, Department of General Affairs and Accounts ;

Have approved and confirmed :—

CLAUSE 1.

In the month of January 1890 the Deputation shall present a statement to Our Minister charged with administering the law for regulating primary instruction, of the sums approved by them which in the budget of each commune in their province are devoted to the expenses of primary instruction for that year . . . relative to the hire of school premises and teachers' dwellings.

The statement likewise includes the figures of the Government grant to the commune for the provision of salaries to teachers, both male and female, in the primary schools, granted before the law of 17th August 1878 (*Staatsblad* No. 127) came into effect. Of sums more recently approved by them, or placed by them on the communal budget . . . for the expenses named in the first section of this clause, the Deputations must furnish a statement to Our Minister aforesaid within a fortnight of the date of their decision.

CLAUSE 2.

Our Minister aforesaid determines the advance to which each commune may lay claim for the year 1890, estimated according to the sums referred to in Clause 1 of our present decree, and gives notice thereof to the Deputations.

CLAUSE 3.

At the expiration of the period when payment becomes due by the commune to make good the expenditure on the establishment, alteration, or purchase of school premises, and after the declaration claiming reimbursement of the expenditure thereby incurred has been received by the commune, the communal authorities shall send to the Deputations a declaration claiming on the amount of this expenditure a reimbursement of 25 per cent. owed to them by the State.

The communal authorities shall add thereto a copy duly signed in the presence of witnesses of the declaration of the contractor who undertook the establishment or alteration of the school premises or of the vendor of the school premises or of the site destined for such premises, and shall add to that document a statement to the effect that what the contractor or vendor claims from the commune on behalf of the aforesaid undertakings is rightfully due, and that the sum has not already been settled.

The declaration is forwarded with this addition to Our Minister aforesaid by the Deputations, after these latter bodies have added to the document, an explanation to the effect that the expenditure, 25 per cent. of which is claimed for reimbursement by the Government, must devolve on the communal budget for the year 1890.

A precisely similar course is pursued with regard to the reimbursement of the 30 per cent. claimed from the Government on the total expenditure of the establishment, alteration, and purchase of site for school premises and teachers' dwellings, and of acquiring the necessary school furniture when the school is first established, provided the designs for the building and alteration of schools and teachers' dwellings have been previously submitted before 24th September 1889 to the approval required by Clause 50 of the law of 17th August 1878 *Staatsblad* (No. 127).

The copy of the contractor's or vendor's declaration to be furnished by the communal authorities together with their declaration in that case—*a*, when it concerns the cost of the building or alteration of school premises and teachers' dwellings, and when the plans for such building or alterations are submitted to the approval of the district school inspector, shall be completed by that officer with a declaration of the exact date on which these plans were received for approval; and further, *b*—when it concerns the cost of the school furniture necessary upon the establishment of the school premises, the declaration shall be completed with a statement that the school furniture of which mention is made in that document were:—

1. Obtained when the school was first established.
2. Necessary for the establishment.

Payment upon the basis of the declarations is made within four weeks after they have been presented to Our Minister aforesaid, and found by him to be in order.

CLAUSE 4.

In the month of January 1892 the Deputations furnish a statement to Our Minister aforesaid of the amount of the expenditure which, as shown by the accounts for the year 1890, has been incurred by each commune in their Province; and shall claim reimbursement In cases where the accounts are not yet determined at that period, the statement must in each case be received a fortnight after they have been determined.

CLAUSE 5

Our Minister aforesaid determines the exact figures of the amount to which each commune lays claim, as reimbursement for the year 1890, after he has received the statement mentioned in Clause 4. He gives notice thereof to the Deputations. The difference between the amount of the repayment due and that received by the commune, is either restored to the commune by placing that sum to its credit for the following year, or else is added to the advance granted to the commune for the year 1892, by virtue of Clause 48 of the law for the regulation of primary instruction, according as the said difference may be to the advantage of the commune or to that of the Government.

CLAUSE 6.

Our Minister aforesaid examines the statements and additions of certain communal accounts relating to the year 1890, so far as they concern the costs mentioned in this decree.

He sends these back to the Deputations with observations to which his examination has given rise, and, where necessary, alters the amount of the repayment.

CLAUSE 7.

The statements quoted in Clauses 1 and 4, and the declarations in Clause 3 are made up in the form appointed by Our Minister aforesaid.

CLAUSE 8.

Our decree of 3rd October 1884 (*Staatsblad* No. 206) remains in force for the years 1888 and 1889, but with the understanding that the recovery (by Government) of the surplus which the commune has enjoyed in advance during the year 1888, shall be considered in determining the advance which shall be granted under Our present decree by virtue of Clause 2.

CLAUSE 9.

This decree comes into force on the fifth day after publication.

Our Minister of the Interior is charged with the administration of this decree, which shall be placed simultaneously in the "*Staatsblad*" and "*Staatscourant*," and of which a copy shall be forwarded to Our Minister of Finance, to the Council of State, and to the General Accountant's office.

(Given at The Loo, the 23rd of December, 1889.

WILLIAM.

The Minister of the Interior,

MACKAY.

December 27th, 1889.

The Minister of Justice,

RUYS VAN BIRRENBROEK

C.—THE EDUCATION LAW OF 1857

CLAUSES RELATING TO PRIMARY INSTRUCTION.

WE William III. by the Grace of God, King of the Netherlands, Prince of Orange-Nassau, Grand Duke of Luxemburg, &c., &c.

To all who shall see or hear this read, greeting :

WHEREAS We have taken into consideration that Article 104 of the Fundamental Law provides that the establishment of Public Instruction, with due respect to everyone's religious principles, shall be regulated by Law : that throughout the kingdom sufficient public Primary Instruction shall be given by the Authorities, and that education shall be free, subject always to the superintendence of the authorities, and as far as concerns Intermediate and Primary Instruction, subject also to examination into the capacity and morality of the master : all of this to be established by law :

That, in the meanwhile, and until provision shall be made for the regulation of Intermediate and University Instruction, it is necessary to give effect to these provisions as far as Primary Instruction is concerned ;

Therefore We, having heard the Council of State, and by and with the advice of the States General, have thought good and determined, as We think good and determine by these presents :

GENERAL PROVISIONS.

ARTICLE I.

Primary Instruction is divided into Ordinary and Higher Instruction.
Ordinary Instruction includes :—

- a.* Reading.
- b.* Writing.
- c.* Arithmetic.
- d.* The Elements of Morphology. (Knowledge of form in general).
- e.* " " of the Dutch Language.
- f.* " " of Geography.
- g.* " " of History.
- h.* " " of Natural Philosophy.
- i.* Singing.

The Higher Instruction is considered to include :—

- k.* The Elements of the Modern Languages.
- l.* " " of Mathematics.
- m.* " " of Agriculture.
- n.* Gymnastics.
- o.* Drawing.
- p.* Needlework.

ARTICLE 2.

Primary Instruction may be given either in schools, or in the houses of the parents or guardians of the children.

The former is School Education, the latter Home Education.

Instruction given to the children collectively of not more than three families is to be considered as Home Education.

ARTICLE 3.

Primary schools to be distinguished as Public and Private Schools.

Public Schools are those established and maintained by the Communes, the Provinces, and the Government, severally or in common ; all others are Private Schools.

Subsidies may be granted to Private Schools on the part either of the Commune or of the Province under such conditions as the Communal, or Provincial Authorities may deem necessary. Schools thus assisted shall be open to all children, without distinction of religious creed. The 1st and 2nd clauses of Article 23 are applicable to these schools.

ARTICLE 4.

No school instruction shall be given in buildings declared detrimental to health by the District School-Inspector, or insufficient in point of room for the number of children attending the school. In the event of the decision of this officer not being acquiesced in, the matter shall be decided by the Deputations, after a fresh and independent inquiry.

Further appeal* from the decision of the School-Inspector as well as from that of the Deputations, must be made within fourteen days from the day when notice of the decision has been received by the parties interested.

All persons to whose prejudice the decision may operate are qualified thus to appeal ; that is to say, the parents or guardians of the children attending the school, if the District School-Inspector shall have acquiesced in the decision of the Deputations. Pending the final decision, instruction may continue to be given in the building objected to.

ARTICLE 5.

School education shall be given by Head-teachers and Assistant-teachers, Head-Mistresses, and female Assistant-teachers, and both male and female Pupil-teachers.

Pupil-teachers are those who, not having yet attained the age at which they can be admitted for examination as Assistant-teachers, assist in giving school instruction.

Having attained that age, they may continue to act as Pupil-teachers during the time that is yet to elapse before they can be admitted for examination. Pupil-teachers failing to pass the examination mentioned in the 2nd and 3rd clauses, or having been prevented, by reasons satisfactory to the Provincial Inspector, from presenting themselves for examination, may continue in function as Pupil-teachers until the next examination.

ARTICLE 6.

Nobody is allowed to give Primary Instruction, who does not possess the proofs of qualification and morality required by this Law.

Foreigners require, besides, Our sanction.

* This final appeal is to the Crown ; see Article 13 of this Law.

ARTICLE 7.

The provisions of the preceding Article are not applicable to—

a. Pupil-teachers, so far as instruction in the school where they are employed is concerned ;

b. Those who give Primary instruction to the children of one family exclusively ;

c. Those who, not making a profession of Primary instruction, but being willing to be employed without any pecuniary remuneration, may have obtained Our permission to give such instruction.

d. Bachelors and Doctors in Arts and Sciences, in so far as, by reason of their University degrees, they are qualified to give instruction in one or other of the branches mentioned in Article 1.

ARTICLE 8.

Any person giving Primary Instruction without being qualified, or in violation of the 1st clause of Article 4, shall, for the first offence, be punished with a fine of at least twenty-five but not exceeding fifty florins ; for the second offence, with a fine of fifty but not exceeding a hundred florins, and imprisonment for eight or more, but not exceeding fourteen, days, cumulatively or separately ; and for each subsequent offence, with imprisonment for at least one month or more, but not exceeding one year.

Any person giving Primary Instruction beyond the limits of his qualification, shall be liable to half the amount and duration of the above-mentioned punishments. Assistant-teachers, temporarily placed at the head of a school, provided the temporary occupation does not last longer than six months, are excepted from these provisions.

ARTICLE 9.

On every condemnation to a fine it shall be declared by the judge that, on failure of payment of the fine and costs by the offender within two months after having been summoned to pay, the penalty inflicted shall be changed into imprisonment, for not more than fourteen days if the fine exceed fifty florins, and for not more than seven days if a fine not exceeding fifty florins has been imposed.

ARTICLE 10.

Except in the cases mentioned hereafter, the qualification to give Primary Instruction ceases for any person condemned by final sentence,—

a. for crime.

b. for theft, swindling, perjury, breach of trust, or immoral conduct.

ARTICLE 11.

No person having lost his qualification for giving Primary Instruction can recover it.

In the cases mentioned in the 7th clause of Article 22, and in Article 39, it can be restored by Us.

ARTICLE 12.

For the Education of Teachers there shall be at least two Government Training schools ; and Normal Courses shall be established in connection with some of the best Primary Schools by authority of the Government.

The education of male and female Teachers in the Primary Schools shall be promoted by Government as much as possible.

ARTICLE 13.

From every decision taken by the Deputations in virtue of this law an appeal lies to Us.

ARTICLE 14.

The provisions of this Law concerning male Teachers are likewise applicable to female Teachers, in so far as it does not contain any exceptions for the latter.

ARTICLE 15.

This Law is not applicable, —

a. To those who give instruction exclusively in one of the branches mentioned under *i*, *n*, *o*, and *p*, of Article 1, and to the schools destined for those purposes.

b. To Military Instructors and the instruction given by them to military men.

OF PUBLIC INSTRUCTION.

§ 1. OF THE SCHOOLS.

ARTICLE 16.

In every Commune, Primary Instruction shall be given in a certain number of schools, sufficient for the number and requirements of the population, and open to all children, without distinction of religious creed.

The instruction shall include at least the subjects classed from *a* to *i* in Article 1. Wherever any want exists of extension, such being practicable, all the subjects classed from *k* to *p* in Article 1, or one or more of them, shall be included in the instruction.

Two, or more, adjoining Communes may join in the establishment and maintenance of combined schools.

ARTICLE 17.

The Council of the Commune shall fix the number of schools. Its resolution shall be communicated to the Deputation.

If the Deputation think the number insufficient, they shall order an augmentation.

If it shall appear insufficient to Us, an augmentation may be ordered by Us.

The extension of instruction, mentioned in the 2nd clause of the last Article, shall be established in the same way.

§ 2. OF THE TEACHERS.

ARTICLE 18.

If the number of pupils in one school exceed seventy, the Head-teacher shall be assisted by one Pupil-teacher; in schools exceeding one hundred, by one Assistant-teacher; exceeding one hundred and fifty, by one

Assistant and one Pupil. Beyond the latter number, he shall be assisted by one Pupil-teacher for fifty, and by one Assistant for one hundred, pupils respectively.

ARTICLE 19.

A yearly salary shall be assigned to every Head-teacher, besides a house rent-free, with a garden, if possible.

In case no house rent-free can be provided for him, he shall receive an equitable compensation for house-rent.

In case of disagreement between the Communal Council and the Teacher with respect to the amount of such compensation, the question shall be decided by the Deputation.

For every Pupil-teacher mentioned in the last Article, an additional sum shall be granted to the Head-teacher.

To every Assistant-teacher a yearly salary shall be assigned.

The yearly salaries and additions shall be fixed by the Communal Council, subject to the approval of the Deputation.

The amount of the yearly salary for a Head-teacher shall be at least 400 florins ; for an Assistant-teacher at least 200 florins. The amount of the additional sum shall be at least 25 florins (for each Pupil-teacher).

ARTICLE 20.

In those Communes where, on account of their large and scattered population, a greater number of schools are required than would otherwise be necessary, a Head-teacher, or Assistant-teacher, whose yearly salary shall be at least 200 florins, may be placed at the head of those schools, subject to the approval of the Deputation.

ARTICLE 21.

In order to be qualified for appointment as Head-teacher or Assistant-teacher, the candidate is required to possess—

a. A Certificate of capacity to give school instruction.

b. Testimonials of good moral conduct accorded by the council of administration of the Commune, or Communes, where the candidate has been living during the last two years.

ARTICLE 22.

Head-teachers shall be appointed by the Communal Council, from a list containing not less than three, nor more than six names, made up by the Burgomaster and Assessors, in concert with the District School-Inspector, after a competitive examination conducted by the latter, or under his direction, in presence of the Burgomaster and Assessors (or of a deputation from them), and of the Local School Committee (or of a deputation from that Board). The members of the Communal Council shall be invited to be present at the examination.

Assistant-teachers shall be appointed by the Communal Council, from a list containing three names made up by the Burgomaster and Assessors, in concert with the Head-teacher and the District School-Inspector.

Head-teachers and Assistant-teachers may be suspended by the Burgomaster and Assessors, after consultation with the District School-Inspector. The Burgomaster and Assessors shall give an account of their decision to the Communal Council as soon as possible.

Head-teachers and Assistant-teachers may be dismissed by the Communal Council on the requisition of the Burgomaster and Assessors, and the District School-Inspector. Resignations are accepted by the Council of the Commune directly.

If suspension or dismissal be necessary, either according to the opinion

of the Local School Committee, or of the District School-Inspector, and the Communal Council delay, or refuse, to proceed thereto, such suspension, or dismissal, may be effected by the Deputation.

Suspension shall never exceed a term of three months, and the salary may continue to be paid, or be partially or entirely withheld, during suspension.

Those who are dismissed on account of scandalous conduct, or of the propagation of doctrines either inconsistent with morality or tending to excite disobedience to the laws of the country, may be declared by the Deputation to have lost their qualification to give instruction.

The appointment and dismissal of Pupil-teachers is made by the Head-teacher subject to the approval of the District School-Inspector.

In cases of suspension, of dismissal, or of a vacancy in the place of Head-teacher or Assistant-teacher, the Burgomaster and Assessors shall provide for the temporary occupation of the vacant place; in the case of a Head-teacher, in concert with the District School-Inspector; and in concert with the Head-teacher, in the case of an Assistant-teacher. The place of Head-teacher shall be filled up within six months at most after becoming vacant.

ARTICLE 23.

The system of education in the schools, while imparting suitable and useful information, shall be made conducive to the development of the intellectual capacities of the children, and to their training in all Christian and social virtues.

The teacher shall abstain from teaching, or permitting to be taught, anything inconsistent with the respect due to the religious opinions of others. Religious instruction is entrusted to the ecclesiastical communities. The school-rooms shall be at their disposal for that purpose out of school hours, for the benefit of the children attending the school.

ARTICLE 24.

The Head-teacher and Assistant-teachers are not allowed to hold any office or employment, except with the approval of the Deputation, after consultation with the Burgomaster and Assessors, and, in Communes of 3,000 inhabitants and upwards, with the Local School Committee, and in other Communes with the District School-Inspector. They are not allowed to carry on any business, to work at any trade, or to exercise any profession: this prohibition is applicable also to members of the families of the Head-teachers and Assistant-teachers, so far as it relates to carrying on any occupation of this kind in their dwellings.

ARTICLE 25.

The Head-teacher and Assistant teachers shall be entitled to a pension from Government in the following cases and under the conditions thereto annexed.

ARTICLE 26.

The right to a Pension is acquired after receiving an honourable discharge on reaching the age of sixty-five years, and completing a period of forty years' service.

A Pension may likewise be granted to those who, after ten years' service, have become incapable of performing the duties of their calling, on account either of mental or bodily infirmities, and have received an honourable discharge on such grounds.

The incapacity shall be established by the declaration of the District School-Inspector and of the Deputation. In calculating the amount of the

pension, such services only shall be taken into consideration, as may have been performed as Head-teacher, or as Assistant-teacher, under this Law, or, previously to this law coming into operation, as Teacher of a public school of Primary instruction.

Those who have not received an honourable discharge, forfeit their right to a pension.

ARTICLE 27.

The Pension shall amount for each year's service to one sixtieth part of the annual salary, which during the last twelve months previous to an honourable discharge, may have served as a basis for the payment of the contributions mentioned in Article 28 ; it shall not, however, in any case, exceed two-thirds of the annual salary.

ARTICLE 28.

As a contribution to the Pension Fund, Head-teachers and Assistant-teachers shall pay from the day on which this law comes into operation, two per cent. per annum of their yearly salary. This contribution shall be collected on behalf of the State, at the charge of the Commune, and accounted for to the Public Treasury.

ARTICLE 29.

Those Communes in which Head-teachers or Assistant-teachers shall be pensioned by virtue of this Law, shall make good to the Government a third part of the amount of such pensions.

§ 3. OF THE COSTS OF INSTRUCTION

ARTICLE 31.

Each Commune shall provide for the costs of its Primary Instruction, for so far as these costs are not charged to others, or shall not be provided for in any other manner.

ARTICLE 32.

These charges are :—

- a. The yearly salary of the Head-teachers and Assistant-teachers.
- b. The additional remuneration on account of Pupil-teachers.
- c. The charges for the erection and maintenance, or for the rent of school-buildings.
- d. For providing and keeping in order the school furniture and school-books, and for other school requirements for the pupils.
- e. For light and fire for the school-rooms.
- f. For the erection and maintenance, or for the rent of dwelling-houses for the teachers.
- g. Compensation to the Head-teachers in lieu of a house rent-free.
- h. The contribution of the Commune to the pension of the teachers.
- i. The expenses of the Local School Committee.

ARTICLE 33.

To meet these charges in part, school fees may be required from each child attending the school. Children supported by public rates, and such as, though not receiving relief, are unable to pay for their schooling, shall not be called upon for this payment.

The Communal Council shall provide, as far as possible, for the school attendance of children of parents receiving relief, or in indigent circumstances.

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ARTICLE 35.

The school fee shall be the same for all children of the same class in any school.

For two or more children of the same family, attending school at the same time, the rate of payment may be reduced.

ARTICLE 36.

If, after inquiry by the Deputation, and after the report thereon of the States of the Province, We shall judge any Commune to be too heavily taxed by the expenditure requisite for suitable establishments of Primary Instruction, such portion thereof as is to be charged upon the Commune shall be fixed by Us, and the deficiency shall be made up by the Province, and by the State, in the proportion of one half by each.

OF PRIVATE EDUCATION.

ARTICLE 37.

For conducting education in private schools, or in private houses, the following qualifications are required :

- a. A certificate of Capacity.
- b. Testimonials of the same description as those mentioned in Article 21 b.
- c. A Certificate that all these documents have been inspected and found in due order by the Burgomaster and Assessors of the Commune where the instruction is to be given.

ARTICLE 38.

The Burgomaster and Assessors shall give their decision respecting the issue of the Certificate, mentioned under Article 37 c, within four weeks from the date of the claim of such Certificate. An appeal may be made from such decision to the Deputation, or an appeal may be made, if no decision shall have been communicated to the parties interested, within the above-mentioned period. After rejection of appeal by the Deputation, or in default of notice of their decision within six weeks to the parties interested, an appeal may be made to Us.

ARTICLE 39.

Teachers who, in conducting education in private schools, or in private houses, shall propagate doctrines inconsistent with morality, or tending to

excite disobedience to the laws of the country, may, on the representation of the Burgomaster and Assessors, of the Local School Committee, or of the District School-Inspector, be declared by the Deputations to have lost their qualifications to give instruction.

This Provision is also applicable to such teachers as make themselves obnoxious by scandalous conduct.

OF THE CERTIFICATES OF CAPACITY TO GIVE INSTRUCTION.

ARTICLE 40.

Certificates of Capacity for giving instruction in schools and private houses are to be obtained by passing examinations.

ARTICLE 41.

An opportunity for such examinations shall be afforded twice a year in each Province, by a Commission, composed of the Provincial-Inspector and four District School-Inspectors.

This Board shall hold its sittings in the capital of the Province. It shall have power to attach to itself Assistant-Examiners.

The appointment of the District School-Inspectors, and the fixing of the time of meeting of the Boards, shall be settled by Our Minister of the Interior.

The examinations shall be held in public, except those for the female teachers.

ARTICLE 42.

The time when the Examinations are to take place, shall be made known to the public by advertisement.

Any person desiring to present himself for examination, shall apply in due time to the School-Inspector of the District where he resides, or where, if a stranger, he intends to establish himself, with notice of the Certificate which he desires to obtain.

He must further produce one or more testimonials of moral conduct, and his certificate of birth.

The time and the place of the Examination will be communicated to him by the District School-Inspector.

He shall present himself for examination in the Province where he resides, or, if a stranger, in the Province in which he intends to establish himself.

ARTICLE 43.

In order to be admitted to examination, the candidate must have attained the requisite age ; this is fixed at eighteen years for Private and Assistant-teachers of either sex, at twenty-three years for Head-masters and Head-mistresses.

ARTICLE 44.

Candidates for examination for the purpose of obtaining a Certificate of Capacity as Assistant-teachers of either sex, are required :—

To read and write well.

To have an adequate knowledge of Analysis, of the rules of Spelling, and of the Elements of the Dutch Language.

To be able to express themselves with correctness and ease, as well orally as in writing.

To know the rudiments of Morphology.

Arithmetic, with vulgar and decimal fractions, applied to money, weights, and measures; in addition to this, male candidates are required to be acquainted with the Theory of Equations.

Geography and History.

The rudiments of Natural Philosophy.

Theory of Singing.

The Principles of Teaching and Education.

ARTICLE 45.

Candidates for Certificates of Capacity as Head-mistresses, are required to possess attainments of the same description as those required of Assistant-teachers, but more advanced, and applicable to their profession as Head-mistresses.

ARTICLE 46.

Candidates for Certificates of Capacity as Head-masters, are required to possess attainments of the same description as those required from Assistant-teachers, but more advanced, comprehensive, and developed.

ARTICLE 47.

Candidates desiring to obtain, or having already obtained, one of the Certificates mentioned in the last three Articles, may, at their request, be further examined in one, or more of the subjects mentioned under *k* to *p* in Article 1.

ARTICLE 48.

The examination for obtaining a Certificate of Capacity as Private-teacher, of either sex, embraces one or more of the branches mentioned in Article 1.

For this purpose, attainments at least equal to those of Assistant-teachers are required.

ARTICLE 49.

When the examination has been passed to the satisfaction of the Board, they shall deliver the Certificate to the Candidate.

The subject or subjects of higher Primary Instruction, in which the Candidate may have passed his examination successfully, shall be recorded in his Certificate of Capacity to give School-Instruction.

In like manner mention shall be made in Certificates of Capacity to give private lessons of the other subjects of Primary Instruction in which the examination has been successfully passed.

ARTICLE 50.

Certificates of Capacity shall be delivered [on] payment of: ten florins for those of Head-master or Head-mistress;—five florins for those of Assistant-teacher of either sex;—five florins for those of Private-teacher, either male or female, in more than one subject;—three florins for those of Private-teacher, either male or female, in one subject only.

For the first record (as mentioned in Clauses 2 and 3 of the preceding Article), in the Certificate of School-Instruction, three florins shall be paid, and in that for Private Tuition in one subject only, two florins. The first record in the Certificate as Private-teacher in more than one branch, and in general any further records shall be made without charge.

The above-mentioned sums shall go towards the expenses of the meetings of the Boards, including the remuneration to the Assistant-examiners. Any surplus shall be paid into the Public Treasury.

ARTICLE 51.

Certificates of Capacity shall be valid for the whole kingdom.

Certificates for School-Instruction shall be also valid for Private Tuition.

Certificates for Private Tuition also qualify the holders to give instruction in a school, in one, or more, of the branches marked *b*, *c*, and *i* to *p*, inclusive, in Article 1.

Certificates of Capacity as Head-master or Head-mistress qualify equally to hold the place of Assistant-teachers.

In addition to the cases provided for in Article 20, the Certificate of Assistant-teacher may, under the conditions to be prescribed by Us, qualify the holder to be at the head of a Public School.

OF THE SUPERINTENDENCE OF EDUCATION.

ARTICLE 52.

The superintendence of Education, subject to the supervision of Our Minister of the Interior, is confided to—

- a.* Local School Committees.
- b.* District School-Inspectors.
- c.* Provincial Inspectors.

ARTICLE 53.

There shall be in every Commune a Local School Committee.

In Communes united by virtue of the 3rd Clause of Article 16, for the purpose of the erection and maintenance of combined schools, there shall be a joint School Committee.

ARTICLE 54.

In Communes of less than 3,000 inhabitants, the duties of the Local School-Board are performed by the Burgomaster and Assessors.

In other Communes the Boards shall be appointed by the Communal Council.

The office of Member of the School Committee may be held together with that of Member of the Communal Council.

ARTICLE 55.

Every Province shall be divided by Us into School-Districts.

Every District shall be placed under the charge of a District School-Inspector.

In case of decease, sickness, or absence, of the District School-Inspector, provision may be made for the performance of his duties by Our Minister of the Interior.

ARTICLE 56.

The District School-Inspectors shall be appointed by Us for the period of six years.

On the expiration of their period of service, they may be re-appointed.

They may be dismissed at any time by Us.

ARTICLE 57.

The District School-Inspectors shall receive a certain sum from the Public Treasury, as allowance for travelling expenses and maintenance.

ARTICLE 58.

In each Province there shall be one Provincial Inspector. They shall be appointed by Us. They may be dismissed at any time by Us.

They shall receive from the Public Treasury a yearly salary, and an allowance for travelling expenses and maintenance.

ARTICLE 59.

The Provincial Inspectors shall be summoned to meet together once a year, by Our Minister of the Interior, for the purpose of deliberating upon, and promoting, under his authority, the general interests of Primary Instruction.

ARTICLE 60.

The Provincial Inspectors shall hold no office, or employment, without Our permission.

ARTICLE 61.

The Members of the Local School Committee, the District School-Inspectors, and the Provincial Inspectors, before entering upon their duties, shall be sworn, or promise upon their honour, to discharge them duly and faithfully.

The oath shall be administered, or the promise accepted, for Members of the Local School Committees, in Communes of 3,000 inhabitants and upwards, by the Burgomaster; in other Communes by the Judge of the Canton where they reside; for District School-Inspectors, by Our Commissary in the Province, and in the case of Provincial Inspectors, by Our Minister of the Interior.

ARTICLE 62.

The Members of the Local School Committees, the District School-Inspectors, and the Provincial Inspectors are empowered to prosecute any person for transgressions of this Law.

ARTICLE 63.

All Schools where Primary Instruction is given, whether public or private, shall be open at all times to the Members of the Local School Committees, to the District School-Inspector, and to the Provincial Inspector.

The Teachers are bound to give them any information that may be required concerning the School and the instruction.

Default in this respect shall be punished with a fine of twenty-five florins, or imprisonment for three days; and for every fresh offence, with both penalties together.

ARTICLE 64.

The Local School Committee shall carefully inspect all schools in the Communes where Primary Instruction is given. They shall visit them at least twice a year, either collectively or by a Deputation from their body. They shall see that the regulations concerning Primary Instruction are

strictly observed. They shall keep a record of the teachers, of the number of pupils, and of the state of the instruction given. They shall send in to the Communal Council, every year before the 1st of March, a Report, with their observations on the state of education in the Commune, and they shall send a copy of this Report to the District School-Inspector. They shall give notice to him of any important alterations that may have taken place in the state of the Schools ; they shall furnish him and the Provincial Inspector with all the information they may each require ; they shall accord their co-operation to such Teachers as may require it, and shall consider it their duty to promote the interests and prosperity of the schools to the utmost extent of their power.

ARTICLE 65.

The District School-Inspectors shall always be fully acquainted with the state of the schools in their District. They shall visit, at least twice a year, all schools where Primary Instruction is given and keep an accurate record of such visits. They shall see that the regulations concerning Primary Instruction are strictly observed. They shall correspond with the Local School Committees, and with the Communal Councils ; they shall lay before them, as well as before the Provincial Inspector, such proposals as they may think conducive to the interests of education. They shall report to the said Provincial Inspector everything which, in visiting the schools, has appeared to them of any importance, and furnish him with such information as he may require. They shall send in to the Provincial Inspector, before the 1st of May in every year, a Report on the state of education in their District, with their remarks thereon, and send a copy thereof to the Deputation. They shall promote the interests of the Teachers, and their periodical Meetings, and be present at them if possible.

ARTICLE 66.

The District School-Inspectors shall have access to the Meetings of all Local School Committees in their District, and shall have consultative powers at such Meetings.

ARTICLE 67.

The Provincial Inspectors shall, both by visiting the schools, and by oral and written communications with the Local School Committees and with the Communal Councils, do their utmost for the improvement and prosperity of the schools. They shall advise Our Minister of the Interior on any questions respecting which their opinion may be required. They shall prepare from the annual reports of the District School-Inspectors a Report, with their own observations, on the state of education in their Province, and send this Report, before the 1st of July in each year, to Our Minister of the Interior.

TRANSITIONAL PROVISIONS.

ARTICLE 69.

The yearly salaries of all public Head-masters and Head-mistresses in actual service at the time of this Law coming into operation, shall, in no case, as long as they continue to hold their places, be fixed at an amount less than the average annual income which they have been receiving during the five years preceding the above date ; or, for those who have been in service for a shorter time, during such shorter period.

ARTICLE 70

To carry into effect the Provisions respecting the number of schools in proportion to the population and their wants, and the extension of the instruction (Articles 16 and 17), the assistance in teaching to be afforded to the Head-master (Article 18), the yearly salaries and other emoluments of the Head-masters and Assistant-teachers, and the additional remuneration on account of the Pupil-teachers (Articles 19 and 20), and the costs of education (Articles 31—35),—a term of three years at most is allowed, reckoning from the date of this Law coming into effect.

During such term the yearly salaries and contributions of the Provinces and of the Government shall be paid to the Head-masters and Head-mistresses and to the Communes, according to the amount due for the time being at the date of this Law coming into effect.

ARTICLE 71.

Private schools in receipt of subsidies, at the date of this Law coming into effect, either from the Commune, or from the Province, and not fulfilling the condition of the 4th clause of Article 3, shall not continue to receive such subsidies for a period exceeding one year from the first date above-mentioned.

ARTICLE 73.

This Law shall come into operation on the 1st of January, 1858.

Saving the Provisions of Article 70, all existing general Provincial and Local Regulations concerning Primary Instruction will then be abolished; the Provincial School Commissions, Local School Committees, and Sub-Committees dissolved; the District School-Inspectors dismissed, and the system of superintendence of schools according to the present Law substituted for them.

We therefore decree etc., etc.

(Signed) WILLIAM.

The Minister of the Interior.

(Signed) A. G. A. VAN RAPPARD.

THE HAGUE, 13 August, 1857

(ii.) NOTE ON AN INFANT SCHOOL IN AMSTERDAM,
FOUNDED IN 1830 BY THE SOCIETY OF
FRIENDS.

In the April, 1901, number of "The Leightonian," the Leighton Park School Magazine, is an interesting account by the Editor, Mr. E. Little, of an Infant School in the Beerenstraat, Amsterdam, which was founded by the London Society of Friends early in the last century. The story of the founding of this school, called "Bewaarschool Amsterdams Welvaren," in memory of the event to which it owes its origin, "is told," to quote from Mr. Little's article, "by a long inscription written in large characters on the wall in English and Dutch, which I will leave to speak for itself. It runs as follows:—

"This infant school, established since 1830, was founded by the Religious Society of Friends in London out of funds arising from the capture of a Dutch East Indiaman by one of their members during the war between England and America, when Holland was in alliance with the latter.

"This religious Society believes war to be forbidden to the Christian and will not allow its members to take up arms nor to have any profit whatever from war. So John Warder, who was a Friend that had a share in the English vessel which had captured the Dutch Indiaman, but without his knowledge or approval, gave up the money he received for his portion of the prize to his Friends, who undertook for him the task of finding out the sufferers by the capture of the vessel and to make them compensation in money for their losses. But it took many years before this could be done, chiefly from the wars which raged on the continent; and when the opportunity occurred, the original sum had been so increased by investment that, after paying to all the sufferers that could be found both principal and interest up to the time of payment, there still remained a sum of money over. This money was again invested, and the Friends who had the care of it let it increase by accumulation of interest, till they became anxious to apply it in some way for the benefit of Holland, and more especially of the city of Amsterdam, which was the port to which the captured ship belonged.

"It was then that John S. Mollett, himself a member of the religious society of Friends and a citizen of Amsterdam, saw, when in London on a visit, an Infant School, then first established, and was so pleased with its usefulness as to wish for one in his city, for there were no infant schools then in Holland. He found the Friends willing to have the money remaining from the Dutch ship devoted to such a purpose; so a house in the Beerenstraat was bought, and the school has been there ever since. It was the first Infant School established in Amsterdam, and is now the only one where the education given is quite without subscriptions. About 120 children attend daily.

"The house became so old that it was feared it would fall in and the School would be closed, because the money held by the Friends was not enough to rebuild the house. But they did not like that an Institution, which was doing good and was a proof of their views against all war, should cease to exist, and so have subscribed among themselves and rebuilt the school at their own expense.

"It is hoped it will now long remain, and be to the neighbourhood, as the name of the captured ship indicates, an "Amsterdam's Welvaren."

"The infant School, as stated above, is self-supporting, and is managed by a local committee. The children, who are from three to six years old, pay a penny or twopence a week. Besides the two rooms on the ground floor, which are used also on the Sunday, there is a good basement, where on my last visit one class was engaged in kindergarten games, with a little open ground at the back, and upstairs a living room for the mistress and a committee room. In the latter are portraits of Elizabeth Fry and Samuel Gurney."

PRIMARY AND SECONDARY
INSTRUCTION
IN
PORTUGAL.

Translated and abridged (except where otherwise stated) from the Official Regulations for Primary and Secondary Instruction, from "L'École Primaire," by Caetano Pinto, and from "Méthodes d'Enseignement dans les Écoles Primaires," by Eugenio de Castro Rodrigues; issued in connection with the Paris Exhibition of 1900 by the Portuguese Government.

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Reading. Portuguese. Writing. Arithmetic. Religious
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Statistical Table.

1. The first part of the document is a list of names and addresses of the members of the committee.

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UNIVERSITY OF COIMBRA.

PRIMARY AND SECONDARY INSTRUCTION IN PORTUGAL.

HISTORICAL INTRODUCTION.

Since its inauguration in the thirteenth century by Don Denis, Thirteenth Century Inauguration under Don Denis. the son of Alphonso III., popular education in Portugal has had a long and troubled history. The French influences under which Don Denis was brought up naturally dominated his educational reforms, and later on another extraneous influence was brought to bear, when in the course of the sixteenth century the Jesuits exercised a virtual educational monopoly. But popular education only became an appreciable factor in social life when it was co-ordinated into a legally regulated system, under the auspices of Reform of the Marquis of Pombal 1772. the great Marquis of Pombal, in 1772. Vitalised by a thorough comprehension of the pedagogic standpoint of his time, his reforms included the establishment of a school in each locality, regular inspection by royal inspectors, examinations for teachers, and the allotment of a special fund to educational purposes. Four hundred and forty schools on the mainland, fifteen in the islands, and twenty-four in the colonies were opened at once, and the next year saw the creation of fifty-seven more. But the death of the King and the political changes which it entailed, including the fall from power of the Marquis of Pombal, prevented the complete execution of this measure. Political vicissitudes have been fatal to many projects of educational reform in Portugal. Thus a short-lived revival of educational activity after the revolutionary movement of 1820 was extinguished by the Restoration three years later, and a similar fate befell a projected reform in 1835, for the loss of which the insufficient measures introduced after the September revolution in that year provided no adequate compensation.

At last, in 1844, a Conservative reaction led to the enactment of Code of 1844 a code which, with modifications, lasted in force until 1881. Although it greatly restricted local liberty of action, and omitted any amelioration of the position of teachers, these deficiencies were compensated by the institution of penal responsibility of parents for their children's school attendance and the creation of an educational council with delegates in every district. It also recognised two grades of popular instruction. Later on, under the same code, normal schools were founded at Lisbon and a special education department established under the control of the Minister of the Interior.

The measure under which public instruction in Portugal Decentralising Act of 1881. attained its fullest development became law in 1881, and was

Resumption
of Govern-
ment Con-
trol, 1890

the work of Antonio Rodriguez Sampaio. It devolved the control of public instruction on the municipal authorities and local school boards, each member being made individually responsible for the enforcement of the attendance obligation, and, while retaining the two grades of instruction recognised in 1844, greatly extended their programmes. Under this liberal enfranchisement schools sprang up all over the country, private benefactors coming to the aid of the municipalities in founding and endowing them, the municipality of Lisbon especially distinguishing itself by the number and excellence of its schools. Some local bodies there were, of course, who did not rise to the situation, and showed no adequate comprehension of their obligations under the new Act; but, had there been a really sincere intention to give the policy of decentralisation a fair trial, the enlightenment of public opinion would, with time, have remedied such deficiencies. As it was, in 1890 the Central Government resumed the control of the schools, creating an independent Minister of Education, whose office, however, was abolished in 1892, when educational administration returned to its dependence on the Minister of the Interior. In 1891 the Central Government handed over 2,360 schools to the municipal authorities, in 1892 it received from them 4,472 schools, many of them excellently housed, equipped with efficient teachers, and maintaining an encouragingly progressive attendance.

PRIMARY INSTRUCTION.

Administra-
tion.

The centralising tendency of modern educational legislation in Portugal concentrates the whole administration in the education department, under the control of the Minister of the Interior, who is assisted by a supreme educational council, and presents an annual report on education to Parliament. The educational rôle of the municipalities, although they bear by far the largest share of the financial burden of primary instruction, is merely that of intermediary between the schools and the department so far as concerns the provision and maintenance of buildings and material. In all administrative and financial matters the civil governors of the departments, through their subordinates the communal administrators, are the intermediaries between the department and the schools, while the pedagogic organisation is in the hands of district superintendents of primary instruction. There is no permanent inspecting staff, and no regular Government inspection of the schools, but extraordinary inspections are ordered from time to time at the discretion of the Minister, who, having at his disposal a competent staff of employés, can mobilise an inspecting corps at the shortest notice.

Government
Inspection.

Budget.

In 1888 special funds, administered by the Government, were allocated to purposes of primary instruction. In round figures they provide an annual sum of 6,500,000 francs, and, if this does not suffice to meet the charges imposed by the educational code

the deficiency must be made good out of any available resources possessed by the communes, or, failing these, by a special Government grant-in-aid. The accounts are kept at the Ministry of the Interior, and were as follows in 1900 :—

RECEIPTS.

	Francs.
Municipal contributions - - - - -	1,950,122
Special municipal rate - - - - -	2,749,719
Departmental rate - - - - -	617,719
Interest on legacies - - - - -	6,118
State grant - - - - -	1,266,29

EXPENDITURE.

Primary schools - - - - -	5,935,669
Normal and preparatory schools for primary teachers	324,212
Departmental administration - - - - -	69,550
Sundries - - - - -	260,546

The books to be used in all schools—primary and secondary, public and private—are prescribed by Government, and severe penalties, which may amount to revocation of their certificate, or, in the case of private schools, to the closing of the institution, are imposed on teachers who introduce any but the officially-sanctioned works into their schools. Every five years the Government holds a competition for the best set of school books, the award being made by a jury of nineteen professors—ten secondary and nine primary teachers—from which are excluded all teachers who are authors, editors or publishers of, or have any personal interest in, the works to be examined. The Government often acquires the publishing rights of works selected by the jury, otherwise it fixes the price at which they are to be sold.

The Primary Instruction Act of 1897 recognises two classes of primary schools—elementary, and higher primary or complementary schools. The latter can only be established in towns and villages having a population exceeding 4,000, but in actual fact the higher primary course is only given in connection with the training classes for teachers.

According to the regulations, every parish has an elementary school for each sex, unless the population is so scanty or so scattered over a large area that one mixed school suffices. In thickly-populated districts, where more than one school for each sex is needed, “central schools” are established, each of which forms a group of four graduated classes, with a separate master for each class. Where local circumstances prohibit the establishment of a permanent school, temporary or peripatetic classes for instruction in reading, writing, arithmetic, and religious doctrine may be held as a substitute.

New schools and classes can only be instituted by royal decree, with the consent of the district, municipal, and parish councils, of the district superintendent of primary instruction, and of the civil governor. Elementary instruction is divided into two

School Books.

School Organization and Classification and Distribution of Schools.

Peripatetic and Temporary Classes

Grades of Elementary Instruction.

grades and four classes. In the first grade (three classes) attendance is compulsory for all children between the ages of six and twelve; attendance in the second grade (one class) being a condition of admittance to secondary and technical schools. Children who live at a distance of more than a mile from a school are exempted from attendance, as well as those who can prove that they are receiving equivalent instruction in a private school or at home. The instruction is absolutely gratuitous.

Attendance.
School
Census.

For the purpose of enforcing the attendance obligation, a yearly census of all children of school age in each parish is undertaken in the month of August by a commission consisting of the parish priest, the "regidor," and the "regidor's" secretary.* This census comprises all the children of school age who have been baptised or are resident in the parish, except those who have attained the standard of exemption before their twelfth year. The census returns are affixed to the doors of the parish church, and parents and guardians whose children are not entered in the school register within the period allowed by law, or, having been entered, do not attend the school regularly, are, after a previous warning by the administrator of the commune, liable to a fine of one day's labour or a pecuniary equivalent, the fine being repeated for every year's default till the children reach the age of exemption. The fines are imposed by the administrator of the commune, after hearing the defaulter in his own defence, and the latter has the right of appeal to a judge of first instance.

Penalties for
Non-attendance.

The School
Year.

The school year commences on the 10th of October and ends on the 31st of August. Thursdays and Sundays and national and religious festivals are holidays, and there are besides holidays of eight, seven, and four days respectively at Christmas, carnival, and Easter. The school hours are fixed for each school by the district superintendent in accordance with local requirements, but their number must not exceed six, nor be less than four, in the day. In rural schools, there are generally two daily meetings of equal duration, except where the school building is too small for the number of children in attendance, in which case half the children attend in the morning and half in the afternoon.

The School
Day.

School
Discipline.

Certain punishments and rewards are allowed as aids to the maintenance of discipline. The rewards consist of a public commendation in school, which may, in cases of special merit, be officially communicated to the child's parents, and of presents of books and pictures. Pupils who have shown steady application to their studies, and good conduct, made marked progress,

*The "regidor" is the representative in a parish, or in a group of parishes, of the civil governor of the district, by whom he is appointed; he has the control of the local police, and it is his duty to inform the governor of any omissions or irregularities on the part of the parish council, the local religious fraternities, and charitable associations.

or done service to the school by helping the teacher, have their names inscribed on the monthly board of honour. A prize is publicly presented at the end of the year by the district superintendent to the pupil whose name has been inscribed on the board every month. The punishments vary from admonition or reprimand, deprivation of playtime and keeping in, to temporary suspension or expulsion; sentence of expulsion being pronounced by the Government on the representation of the teacher that the pupil is not amenable to the school discipline, or that association with him is harmful to his school-fellows.

Printed forms are furnished to the schools by the municipalities for the following registers, some of which are preserved at the school and some returned to the respective authorities—a general school register, a register of attendances, an examination register, statistics of marks and attendances, and annual school statistics. School Registers Forms.

Before they can be admitted to the schools, children must present a vaccination certificate and a medical certificate that they are suffering from no contagious disease, and they are forbidden to attend while they or any member of their family are suffering from any infectious malady. The schools are regularly inspected by medical officers, who have to look after the health of the scholars, especially of any who may be suffering from diseases of the eyes, mouth and skin, and report to the local authorities any circumstances which may require the closing of the school. School Hygiene.

The subjects of the primary course are prescribed by the Government code, the apportionment of work to the different classes being made by the district superintendent, and the daily timetable by the teacher. The teacher is left free to choose the methods and systems of instruction he will employ, so long as he applies the best theoretical and practical educational principles; but, of course, the obligation to use only the books sanctioned by Government tends to produce a certain uniformity of system in all schools. In the first grade the instruction comprises reading, writing, arithmetic and the metric system, religious and moral instruction, drawing, manual work, and gymnastics. Curriculum

The second grade carries on the instruction in all these subjects, with the addition of grammar, the elements of chronology, geography, Portuguese history, elementary geometry, and linear drawing.

The higher elementary course consists of Portuguese history, reading aloud and recitation, writing, composition, theoretical and applied elementary arithmetic and geometry, the rights and duties of citizens, elementary notions of economics, accounts and book-keeping, elementary notions of physics, chemistry and natural history as applied to industry, agriculture and hygiene, chronology, geography, Portuguese history, morals and scripture history, linear drawing and design, gymnastics, music, and swimming (where possible).

**Methods of
teaching
reading.**

The Government wisely leaves the teacher perfectly free as to the methods by which he will teach reading. Owing to the fact that every letter in a Portuguese word is pronounced, and that there is comparatively little uncertainty of pronunciation, Portuguese children learn to read with such ease that the old-fashioned spelling method dies hard, and there is really no need for complicated systems. Not that this has hindered their ingenious invention, nor their application by teachers anxious to be up to date in all things pedagogic. Foreign reading methods are little used, being unsuited to the peculiarities of the language.

Portuguese.

But, whatever system he may adopt, the teacher must from the very beginning make the reading and writing lessons the vehicle of instruction in the mother tongue, which only makes its appearance as an independent subject in the second grade. In the reading lesson he must pay careful attention to clear and correct pronunciation, exact definition of the meaning of words, and the addition of new words to the children's vocabulary. In the writing lesson he imparts notions of orthography and simple grammatical inflections, so that the practical teaching of the language and its orthography precedes any systematic grammatical instruction. When he leaves the first grade the pupil knows no grammatical rules, but he has sufficient practical acquaintance with the language to enable him to express simple ideas comprehensibly and without gross faults. In the second grade the grammar is still of the simplest, and the basis of instruction is not an abstract of grammatical rules, but the reading-book. The teacher must not give definitions to be learnt by heart, but must deduce the simplest rules of grammar and syntax from the reading.

In the higher primary course great stress is still laid on practical exercise in language, but systematic grammar plays a larger part in the lessons.

Writing.

The first lessons in writing are chiefly concerned with the position of the child and of his slate or paper, and the way to hold his pencil. The child traces (on a tracing-slate, or by going over, with a pen, letters written in pencil by the teacher) and then copies strokes and letters, a very dull employment, which a child hardly ever does at all well, and which it is desirable to vary, as much as the available number of boards allow, by writing on the blackboard, which is both easier and pleasanter.

In the higher primary school, writing is taken in connection with drawing, and with special attention to form. The most notable Portuguese writing method is that of J. J. Ventura da Silva; it is a veritable treatise, with a folio atlas of forty-three plates.

Arithmetic.

The elementary arithmetic course does not go beyond numeration, the four operations with whole numbers and decimals, and their applications to simple problems of common use, and practice in mental calculation. In the first grade the arithmetical teaching is essentially concrete and practical, numeration being

taught with a mechanical numerator, or, according to Professor Leite's method, with little sticks, or, where no aids of this kind are available, with any objects that may be at hand. The official instructions particularly recommend the avoidance of "all definitions and abstract demonstrations, and especially all falsification of theories in order to bring them within the range of the children's powers of comprehension." As far as possible the teaching should be intuitive and inductive. The metric system naturally lends itself to the teaching of decimals, offering the readiest source for the concrete numbers required, and the pupils must be familiarised with it by means of actual measurements and calculations of current coins. The geometrical teaching is also to be entirely practical and concrete, and is confined to an intuitive acquaintance, by means of models, with the principal geometric figures, and with the different lines, angles, and surfaces on them; of the division of a circumference, of the measurement of angles by a protractor, of the idea of a vertical line demonstrated by a plumb-line, and of a horizontal line as demonstrated by a mason's level, etc.

While the second grade proceeds to the abstract notion of numbers, founded on the concrete work of the previous grade, the higher primary course is again more theoretical and follows the lines of mathematical methods; but in both cases the official instructions lay special stress on the necessity of maintaining the connection with the concrete by means of frequent practice in the solution of problems chosen to illustrate the practical value of the theoretical knowledge acquired.

The inclusion of definite religious teaching in the primary course is a legitimate consequence of the legal establishment of the Roman Catholic Church. The official instructions require no more than the essential points of the catechism approved by the diocesan authorities, and, though the teacher is at liberty to extend his instruction beyond these requirements, the religious teaching must be kept in due proportion to the primary course as a whole and to the capacity of the children. The religious neutrality which characterised the Liberal revolution at the beginning of the century left its impress on the schools in a moderation in this matter of religious teaching which the law has been careful to maintain. But now there are signs of a reaction against this neutrality, and the strictly religious tone of the Throne and upper classes is giving an impulse to religious instruction and education, and, as a matter of fact, the whole atmosphere of public primary schools is impregnated with religious sentiment. Apart from the definite religious instruction, the large number of religious pieces in the reading books, and the personal attitude of the teachers, almost all public primary schools begin and end the school day with prayer. Children who are not Catholics need not attend the religious instruction, but the number of exemptions may be taken as a negligible quantity. Even in the examinations, where the

Religious
Instruction.

omission of a subject might act as an extraneous motive, the exemptions are practically confined to foreigners of other denominations and Jews. Many other motives than the desire for more religious teaching, such as the educative value attached to their disciplinary system, lead parents to prefer private schools, like those maintained by the religious orders, to the Government institutions. But the latest reform of secondary instruction tends to attract pupils from private colleges to the State *lycées*, where, as a guarantee of satisfactory tone and discipline (although definite religious instruction finds no place in the syllabus), the rectorships have, in a majority of cases and with the best results, been conferred upon ecclesiastics.

Morals.

While Portuguese schools are not behind those of other countries in making the whole school training and discipline subservient to moral education, the definite instruction in morals follows no plan which merits the title of method, and is practically limited to the study of the official primer, in which the child's different duties, to God, to his family, to the school, and to himself, are arranged for learning by heart. Besides this, the code requires "that a predisposition towards what is good and right shall be impressed on the children by means of appropriate narratives chosen, with due regard to the age and mental development of the pupils, from sacred and profane history, from actual life, or from the subjects of the reading lesson." The choice and narration of these stories form part of the normal school training, but they demand qualifications not possessed by everyone, and a book which might serve as a guide is much needed.

Rights and
Duties of
Citizenship.

In the higher primary school the moral teaching is rather more didactic, trenching a little on doctrine on the religious, and on philosophy on the moral side. To it is added instruction in the rights and duties of citizenship, with the aim of giving the future citizen such a knowledge of his civic environment as is indispensable in a democratic community. The officially-sanctioned primer gives a brief account of the constitution and functions of central and local government and of the judicial administration, defines civil and criminal responsibility, and explains the conditions and exercise of the political and municipal franchise, etc.

History and
Geography.

A great part of the history, geography, and moral teaching is based on the reading book and given in the reading lesson. History as a separate subject is only taken in the fourth class, and the aim of the teaching is to present a summarised account of the main lines of development in the history of Portugal. The scanty equipment of Portuguese primary schools with teaching apparatus, and the absence of illustrations in the official text books, is especially detrimental to the geographical teaching.

Drawing

But little regard is had in Portuguese schools to the educative value of drawing, and it is really treated only as a training in manual dexterity. It consists in copying straight, curved, and composite lines, and then simple figures and drawings of common

utensils. In the higher primary school, drawing is taken in connection with geography, geometry, and writing.

Manual training for boys has hitherto remained a dead letter in the primary schools for lack of the necessary apparatus and materials, and, as it is not an examination subject, the teachers make no great efforts for its introduction. With the girls it is very different, the instruction in needlework being most regular and often exceeding the requirements of the programme, thanks to the importance attached to it by public opinion.

Manual Work.

Gymnastics are practically not taught at all in primary schools, though they are taught to both sexes in the normal schools, there being no demand for them amongst the class from which the pupils in the primary schools are drawn. Thanks to the Portuguese predilection for sports of all kinds, the children have plenty of physical exercise out of school. While the schools were under municipal control, Lisbon organised instruction in gymnastics and military exercises under special masters, and the boys formed well-equipped and efficient rifle corps, but when the Central Government resumed the direction of the schools in 1892 the corps were disbanded, as useless and expensive, and the special teachers were dismissed.

Gymnas

Choral singing does not form part of the primary school programme, and never attained any degree of popularity when introduced into the Lisbon schools. The very marked musical talent of the people takes other directions, so that it is rare to find even the poorest and most isolated village without a philharmonic society, and the national collection of lyrical songs is very rich.

Choral Singing.

The following is the time-table of the primary schools in Lisbon :—

Time Ta

Subjects.	Boys.								Girls.							
	1st Grade.				2nd Grade.				1st Grade.				2nd Grade.			
	1st Class	2nd Class	3rd Class	4th Class	1st Class	2nd Class	3rd Class	4th Class	1st Class	2nd Class	3rd Class	4th Class	1st Class	2nd Class	3rd Class	4th Class
	No. of Lessons.	No. of Hours.	No. of Lessons.	No. of Hours.	No. of Lessons.	No. of Hours.	No. of Lessons.	No. of Hours.	No. of Lessons.	No. of Hours.	No. of Lessons.	No. of Hours.	No. of Lessons.	No. of Hours.	No. of Lessons.	No. of Hours.
Reading	5	6½	5	5½	4	4½	3	3½	5	5½	5	4½	3	2½	2	2
Writing	5	5	6	5½	2	2	1	1	4	4½	3	3	2	2	1	1
Arithmetic	9	7½	4	4	5	4½	3	3	5	5½	4	3½	3	2½	3	3
Morals and Religious Teaching	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dictation	—	—	3	3	3	3	3	3½	—	—	1	1	3	3	3	3
Drawing	—	—	1	1	2	4	2	1½	—	—	1	1	1	1	1	1
Manual Work	—	—	—	—	—	—	—	—	5	3½	5	5	5	6½	4	3
Grammar	—	—	—	—	3	3½	3	3	—	—	—	—	2	1½	2	1½
Geometry	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1
History	—	—	—	—	—	—	—	1½	—	—	—	—	—	—	2	1½
Geography	—	—	—	—	—	—	—	2	—	—	—	—	—	—	2	1½
Totals	20	20	20	20	20½	21	20½	20	20	20	18½	20	20½	22	18½	18½
Recreation	—	5	—	5	—	4½	—	—	—	5	—	6½	—	4½	—	6½

The following is the type of higher primary school time-table—

Subjects.	No. of Lessons.	No. of Hours.
Portuguese Language and Literature - -	5	5
Arithmetic - - - - -	2	2
Geometry - - - - -	2	2
Natural Science - - - - -	5	5
Geography - - - - -	2	2
Morals and Religious Instruction - -	2	2
Drawing - - - - -	2	2
Writing - - - - -	1	1
Singing - - - - -	2	2
Gymnastics - - - - -	1	1
Manual Work - - - - -	4	4
Total - - - - -	28	28

Examina- tions and Certificates.

On the completion of the first grade course each child receives a certificate from the teacher, countersigned by the district superintendent, that he has completed his compulsory attendance. This certificate admits him to the second grade. Children who have not attended the public primary school can obtain a similar certificate by examination. In order to obtain the second grade certificate the pupil must, at the end of the course, pass an oral and written examination, for entrance to which a fee of thirteen francs is charged. A written and oral examination is also attached to the higher primary certificate.

School Buildings.

It is only of late that much attention has been paid to the provision of properly adapted school buildings. While the schools were under municipal control, many municipalities distinguished themselves by the provision of excellent buildings; thus the normal school for women at Oporto remains as a witness of what decentralisation did for Portuguese education.

The municipalities are charged with the provision and maintenance of school buildings of a uniform plan, prescribed by the Government regulations, which satisfy the most advanced hygienic and pedagogic requirements. According to this plan the school must contain:

An entrance hall, with a separate cloak-room.

One or more class-rooms, namely, one for every fifty children, not less than twelve feet high, and with a superficial area of thirteen square feet per child.

Offices.

An enclosed playground, one-fifth of which is covered, with an area of not less than fifty square feet for each child.

A lodging for the teacher, which may be over the school, but must have a separate entrance.

Any building not specially erected for the purpose must be officially inspected before it can be used as a school.

The provision of the requisite furniture and fittings is also incumbent on the municipal authorities, and must comply with the regulations, and be approved by the district superintendent. The desks preferred are a dual desk of a modified Lenoir type, with a movable seat, and the Bapterosse desk with the English bench. Girls' schools must be provided with the necessary materials and implements for needle-work, with a sewing machine and spinning wheels for linen and silk thread. The formation of a school museum is recommended, with collections of seeds, samples of wood, and other building materials, metals, raw materials, and, if possible, manufactured articles in various stages of production. Portuguese primary schools are as a rule but scantily provided with the diagrams, pictures, models, objects, and maps which play so large a part in modern teaching, the Government and the municipalities concurring in regarding them as the teachers' tools, to be provided by his own initiative. But the financial position of a primary school teacher in Portugal, as in most other countries, does not enable him to do so adequately without an amount of effort and self-sacrifice, to which his surroundings furnish no incentive. This is the more regrettable seeing that the official school books do not indulge in a wealth of illustrations.

Most primary schools have one teacher for all four classes, with an assistant, if there are more than eighty children.* In the "central schools" there is a master for each class. Elementary boys' schools may be taught by a master or a mistress; mixed and girls' schools must be taught by a mistress, and higher primary schools can only be taken by masters, who are generally chosen from "central school" teachers.

There are in Portugal 4,492 primary school teachers in the public service, of whom 2,592 are women. During the last eighteen years the teaching profession has attracted an abundant supply of candidates, especially ladies, who find in it a modest but certain independence.

Teachers must hold the certificate either of a normal school, of a departmental school,† or of a secondary or higher school, and when applying for appointment must present a certificate of character, a medical certificate, and a certificate that they have complied with their obligations of military service. They are appointed by Government for a probationary period of three years before their appointment is made permanent. Primary teachers are of two grades, elementary and higher primary or complementary. The former begin with a salary of 750 francs, which is raised after eight years' service to 900 francs, and after fifteen years to 1,100

*If a teacher has more than sixty children under him, or, with one assistant, more than 100, he may apply for the appointment of a paid monitor, who teaches under his direction. These monitors receive salaries of 360 francs in Lisbon and 240 francs elsewhere. They must be over fifteen, and hold at least the second grade primary certificate.

† See below, p. 456.

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francs. The salaries of higher elementary teachers rise at corresponding intervals from 1,100 to 1,300 and 1,700 francs. Besides their fixed salaries they receive a grant of fifteen francs for every pupil who passes the leaving examination. In Lisbon and Oporto teachers receive allowances of 270 and 360 francs, according to their grade, to compensate them for the extra cost of living in these towns. Assistant teachers are nominated by Government, and have the preference for appointment as teachers over other candidates of equal merit. Their salaries are 510 francs in elementary and 800 francs in higher elementary schools, and they receive allowances in Lisbon and Oporto of 150 and 240 francs respectively. In the girls' schools in Lisbon there are special needlework mistresses with salaries of 1,200 francs a year.* Teachers may be temporarily suspended, with loss of salary, or transferred to another school, or permanently suspended, but only by the education department, on the report of the district superintendent, and after being heard in their own defence. Pecuniary prizes and medals are conferred on teachers of long and distinguished service by the Government, with the consent of the educational council.†

Training.

Lisbon and Oporto each have two normal schools for elementary teachers, one for men and one for women; and in the chief town of each department there is a preparatory course for teachers in connection with the higher primary school. Only the Lisbon and Oporto schools can confer the higher primary teacher's certificate. The whole expense of the normal schools and a part of the cost of the departmental training classes are borne by the Central Government, the municipalities providing the buildings and fittings for the classes. In the four normal schools there are 180 bursaries for poor and deserving students awarded after public competition.

The elementary training course is given in the departmental schools and the normal schools, and lasts two years. It includes: Portuguese language and literature, arithmetic and elementary geometry and their commonest applications, industrial and commercial accounts, geography, chronology and history, morals and the rights and duties of citizenship, some idea of economics, pedagogics and primary school legislation, writing and drawing, elementary notions of physics, chemistry and natural history and their applications to agriculture and hygiene, French, choral singing, manual work, gymnastics. Women students take needlework, embroidery and design as applied to embroidery. The complementary normal course is only given in the normal

* The latest law recognises a class of teachers, for which there are always applicants, whose total remuneration amounts in Lisbon to two francs a day. Now, in Lisbon bread costs more than 50 centimes a kilo, and ordinary wine, of which there is just now an over-supply, 50 centimes a litre!

† In Portugal the office of certificated teacher is a qualification for the parliamentary franchise.

schools; it lasts a year, and gives further instruction in the same subjects as the elementary course.

The staff of each normal school consists of a director and three professors, besides assistant masters. The director is appointed by Government from the school staff, and holds a Government commission. The professors are appointed by competition from certificated primary school teachers; their salaries are 2,000 francs a year for the men and 1,500 for the women. Assistant masters or mistresses receive 1,330 or 1,000 francs respectively. All alike are entitled to a pension after thirty years' service. Normal School Staff.

The departmental classes are under a director, who acts as professor of pedagogics, with a salary of 1,800 francs a year. The staff is that of the higher elementary school, with one primary school teacher. If the class is a mixed one there must be a mistress as well, and the primary school teacher must be a woman. Departmental School Staff.

The maternal schools are for children from three to six years old. The instruction includes cleanliness, health and well-being of the child, language exercises, object lessons, simple narratives adapted to their understanding and tending to the moral and intellectual education of the children, singing, games, and physical exercises. Maternal Schools.

Children are admitted at all times of the year provided they are of the right age, can produce a vaccination certificate, and have no infectious malady. There are no fixed hours of attendance, but the children must not come to school before the lessons begin nor stay after they are over.

Each school is managed by a directress, with an assistant under her for every twenty children.

The premises must satisfy all hygienic requirements and be suitable for use as a school, and there must be a garden or a covered playground. They are adequately provided with the requisite furniture, fittings, and teaching material.

In localities where the needs of the population demand it, free evening continuation classes are held at the schools for men and boys over twelve. The instruction is given by the primary school teacher and lasts for two hours every evening. If the municipal council require it, subjects outside the primary school syllabus can be taken. Adult Schools.

The "Dominical" schools hold classes for women on Sundays and saints' days, and give a complete continuation course.

Unofficial instruction enjoys a degree of liberty which, although it may sometimes lead to abuse, yet provides a valuable competition with the official schools, and has contributed to the propagation and development of primary instruction. Hitherto even the legal notification of the opening of schools, as well as their Government inspection, was rarely observed; but of late this liberty has been restricted in one direction by the obligation to use only the officially-sanctioned text-books. The private primary Private Schools.

schools most deserving of mention are those of the orphanage, "Real Casa Pia," at Lisbon, and those of the "Casas d'Asylo da Infancia Disvalida" (Homes for Destitute Children). The school of the "Real Casa Pia" is a model school with 617 children, giving a full course of primary instruction in five classes, besides instruction in French, English, geography, and mathematics, and an industrial workshop training in various trades. The care with which the society chooses its teachers accounts for the success of the children in public examinations, many of them passing into secondary and higher schools.

The "Homes for Destitute Children" have 1,450 children in their twelve homes, to whom they give a complete course of primary instruction, laying special stress on religious training.

Various associations of working men maintain primary schools, the most important are the "Voz do Operario," which has 76 primary schools, with 2,038 pupils, all of whom enter for the official examinations; and the "Gremio Popular," whose primary school has existed for forty-three years.

The various religious corporations have a very large number of schools all over the country, and have done excellent service in the propagation of primary instruction, although it is not their main object.

Besides these gratuitous schools, there are, under private management, a very large number of schools in which fees are charged.

Primary
instruction in
the Colonies.

Although far from having attained the degree of organisation the Government are anxious to introduce, a great deal of careful attention has been devoted to colonial education. Legislation varies in the different colonies, but, as a rule, the home Government and the local authorities co-operate in educational administration, and the inspection is in the hands of the governor of the province.

NUMBER OF SCHOOLS AND ATTENDANCE IN THE DIFFERENT DISTRICTS.

Districts.	Popula- tion by Census 1890 (cor- rected).	Government Schools.						Private Schools.						Totals.					
		Number of Schools.			Schools per 1,000 Inhab.	Attendance.			Number of Schools.			Attendance.			Official and Private Schools.	Total Av'ge per School.	Av'ge of Sch'lrs per 1000 Inhab.		
		Masc.	Fem.	Mixed.		Total.	Masc.	Fem.	Total.	Masc.	Fem.	Total.	Masc.	Fem.				Total.	
Aveiro	-	237,437	158	63	3	224	8,325	2,534	10,859	29	21	50	1,054	1,241	2,295	274	13,154	48	45.7
Beja	-	157,571	70	41	13	124	2,278	1,071	3,349	10	11	21	272	327	599	145	4,548	31.3	28.8
Braga	-	333,308	198	54	31	283	9,005	4,102	13,107	51	47	98	1,628	1,664	3,290	331	16,397	43	48.4
Bragança	-	179,078	164	52	47	263	9,236	4,334	14,070	3	4	7	66	249	315	270	14,355	53.2	80.0
Castelló Branco	-	205,211	135	73	4	212	4,342	2,257	6,599	6	8	14	277	147	424	231	7,023	31.7	34.2
Coimbra	-	318,163	179	66	12	257	7,067	2,465	9,532	40	24	64	1,534	761	2,295	321	11,857	36.9	37.2
Évora	-	119,782	56	30	7	93	2,068	1,552	3,620	10	13	23	287	596	883	121	4,503	37.2	37.5
Faro	-	228,635	60	44	6	110	3,268	2,472	5,740	43	34	77	1,309	1,190	2,499	187	8,289	44	36.0
Guarda	-	248,613	248	106	40	394	7,390	3,734	11,124	7	4	11	137	54	191	405	11,315	27.9	45.5
Leiria	-	215,472	117	86	8	161	3,501	1,232	4,733	30	19	49	366	525	891	200	5,674	29.3	29.3
Lisbon	-	611,168	164	127	34	325	8,230	3,745	11,975	68	327	395	6,536	5,178	11,764	720	23,799	39.9	47.1
Portalegre	-	113,381	58	39	13	110	1,312	1,535	2,847	7	35	42	153	346	504	152	3,851	25.3	33.9
Porto	-	546,292	237	116	21	374	12,743	36,397	49,140	97	190	287	4,491	8,386	12,877	661	32,017	48.4	53.6
Santarém	-	254,729	158	62	7	277	7,151	2,458	9,609	47	110	157	780	1,564	2,324	384	11,933	31	46.8
Vianna do Castello	-	297,366	134	29	6	169	5,233	1,333	6,566	60	34	94	1,427	753	2,185	293	8,354	33.6	42.6
Villa Real	-	237,302	192	100	35	327	6,717	4,371	11,088	16	10	26	507	329	836	353	12,424	35.1	52.3
Vizenda	-	391,015	320	164	23	507	11,059	5,272	16,331	22	9	31	734	380	1,114	533	17,445	32.4	46.4
Angra do Heroísmo	-	72,151	48	38	2	88	1,537	1,502	3,039	2	7	9	72	139	261	97	3,350	34.5	46.4
Funchal	-	134,040	40	23	1	69	1,578	952	2,530	5	27	32	1,245	1,821	3,066	101	5,599	55.4	41.7
Horta	-	56,655	40	34	2	76	1,245	1,380	2,625	11	13	24	142	272	414	105	3,039	23.9	51.7
Ponte Delgada	-	124,758	46	43	10	99	1,362	2,312	3,674	46	27	73	1,469	1,100	2,569	172	6,843	39.7	54.3

SECONDARY INSTRUCTION.

The latest reform of secondary instruction dates from 1894. In introducing the scheme to Parliament the Ministers drew attention to the "pitiable" condition of secondary instruction in Portugal, to its paramount importance to the national well-being, and the urgent necessity of a uniform and properly co-ordinated secondary code.

**Administra-
tion.** For purposes of secondary instruction Portugal is divided into three areas, of which the centres are Lisbon, Coimbra, and Oporto. The chief town of every department has a secondary school or *lycée*.

**Categories of
Secondary
Schools.** There are two categories of *lycées*—central *lycées* with seven, and national *lycées* with five classes. The work in the five classes of the national *lycée* is identical with that of the five lowest classes of the central *lycées*. They form a "general course," sub-divided

**School
Organisa-
tion.** into two sections—a lower with two, and an intermediate with three classes—and prepare for the higher or "complementary" course of the central *lycées* (two classes). The general and the complementary course together prepare for the university. The great majority of pupils take both courses. Each class corresponds to a school year. When the number of pupils in a class exceeds fifty in the three lowest classes, forty-five in the fourth and fifth, and forty in the two higher classes, it must be divided into parallel sections.

School Year The school year begins on the 1st of October, and ends on the 31st of July, with eight days' holiday at Christmas and Easter, and holidays on Sundays, Thursdays, and all religious and national festivals.

School Day. There are two school meetings in the day, morning school lasting three hours and afternoon school not more than three, exclusive of the drawing lessons, which are generally taken late in the day. Each lesson lasts an hour, except drawing, which lasts an hour and a half or two hours, according to the class. The pauses between the lessons must not be less than fifteen minutes. Home-work must not exceed ten hours a week for the first class, twelve for the second, fifteen for the intermediate, and eighteen for the complementary section.

All the lessons are public, but the space assigned to visitors must be completely separate from that occupied by the pupils.

**Attendance
and
Registers.** In each class-room there are registers for attendance and marks, and if a pupil misses more than one-fifth of the total number of lessons he loses his year. Parents and guardians must be informed of any lack of application or irregularity of attendance, and of all punishments inflicted on the pupils. Great stress is laid on the importance of securing the parents' co-operation in the work and discipline of the school, and a report of attendance, conduct, and progress is sent to them at the end of the first five months of the school year.

The punishments permitted by the code consist of a public or private reprimand by the professor, a reprimand before the class and teachers by the class director, or before the whole school by the rector. Expulsion can only be decreed by a two-thirds majority of the council, after hearing the defence of the culprit, and, if it is for more than a year, must be sanctioned by the Government. The pupils of the lower classes may be kept in under surveillance for not more than three hours, or separated from the rest of the class during lessons.

The curriculum for the "general" course includes Portuguese language and literature, Latin, French, German or English (English for students who only take the general course, German being compulsory for those who take the higher course as well, because of its importance for higher scientific studies), geography, history, arithmetic, elementary algebra and plane geometry, the elements of natural history, physics and chemistry, drawing. The subjects of the "complementary course" are Portuguese language and literature, Latin, German, geography, history, algebra, geometry of three dimensions, trigonometry and elementary cosmography, physics, chemistry and natural history, philosophy.

The weekly distribution of lessons and the daily time-table are fixed by the rector in consultation with the school council, having due regard to the official instructions, and must be submitted for Government approval.

The following table gives the weekly time-table for both courses :—

Subjects.	General Course.					Complementary Course.		Totals.
	Lower Section.		Intermediate Section.			Upper Section.		
	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.	Class VII.	
Portuguese Language and Literature	6	6	3	3	4	4	4	30
Latin	6	6	5	5	4	4	4	34
French	—	4	3	3	3	—	—	13
English	—	—	(4)	(4)	(4)	—	—	(12)
German	—	—	4	4	4	5	4	21
Geography	2	1	2	1	1	1	1	9
History	1	1	2	2	2	3	3	14
Mathematics	4	4	4	4	4	4	4	28
Natural & Physical Science	2	2	2	4	4	4	5	23
Philosophy	—	—	—	—	—	2	2	4
Drawing	3	3	3	2	2	—	—	13
Total	24	27	28	28	28	27	27	189

The official code states the object of secondary instruction to be not only the methodical and progressive organisation of definite

knowledge, but the mental development of the pupil by this means, and his preparation for university studies, and lays stress on the capital importance to its realisation of a careful arrangement of the curriculum. No subject stands by itself; all are connected by this unity of aim, and the extension given to each must be determined by its due proportion to all the others. As far as possible the instruction must be intuitive. Secondary instruction will be of little worth if the professors indoctrinate their pupils with the ready-made results of mental processes, without first showing them the elements of the process, thereby enabling them to arrive at the results for themselves. The mode of teaching in which the professor alone speaks appeals mainly to the receptive faculties of the pupil, and should serve, not merely as a means of imparting facts and ideas, but as a model of oral exposition in clear and correct language, carefully avoiding all rhetorical artifice. It should be alternated at frequent intervals with questions, in order to bring into play the reproductive powers of the pupils, test the accuracy and certainty of their knowledge, and ascertain that the matter presented and the manner of its presentation are adapted to their powers of comprehension and assimilation. The duly proportioned combination of the two methods—the appeal to the memory, and the appeal to the understanding—will best serve the purpose of secondary instruction; neither the professor who lectures much and questions little, nor he who questions all the time and does not lecture at all, understands his task. In all their work the teachers must never lose sight of the moral training which the secondary course should afford by the attention and industry required in the classes, punctuality and exactness in the preparation for them, and the ethical content of the various lessons.

Languages.

All the language teaching is founded on reading; grammar, prosody, style, and literary history are all taught in connection with the texts given in the reading book and its notes and introductory chapters. In the lower classes the aim of the teaching is the correct acquisition of the language; in the higher this is applied to a critical study of its literature and its philological history; while the written exercises, beginning with dictation in the lowest, rise to free reproduction, and in the highest classes to original composition.

Portuguese.

Portuguese occupies a very important place in the curriculum, not only for its practical uses, but as a means, through its literature, of training the mind and the imagination, of encouraging moral and patriotic sentiments, and of providing the pupil with a fund of co-ordinated facts, ideas, and words appropriate to their expression, which is inestimable as a basis for higher logical training.

Latin.

Latin owes its prominence and position in the curriculum to its value as an educational discipline, and to the fact that Portugal is a Roman land and Portuguese a Roman tongue. The study of texts must be not only linguistic but also literary, social, and

historical; nor must the pupils be given texts to read, the meaning of which they cannot grasp.

The object of the instruction in modern foreign languages is French, correct reading, speaking, and writing; and the grammatical German and teaching must be restricted to what is indispensable to its attain- English.
ment. In French, as the principal language, the instruction is more detailed, and in the higher classes includes a literary study of the classics of the seventeenth, eighteenth, and nineteenth centuries. All grammatical explanations are to be given in Portuguese.

Geography is eminently associative, serving first as an Geography introduction to, then as the complement, and always as an epitome of, other studies. Properly taught, its value lies in the cultivation of the imagination and powers of visual memory, counterbalancing the appeal to verbal memory of the language teaching. In the first five classes the teaching is mainly by observation and description, becoming more generalised and theoretical in the upper section.

Class I. Biographical notices of the most distinguished characters History. in the national history, taken as the centre of short accounts of the events with which they were connected. II. A very abridged account of the so-called "Eastern" peoples: Egyptians, Babylonians and Assyrians, Phœnicians, Israelites (specially important) and Medes and Persians. III. Greeks and Romans. IV. Mediaeval and modern history. V. Portuguese history up to 1820. VI. and VII. Portuguese history after 1820 and the actual Constitution and Administration. It is not intended to give the pupils a general knowledge of history, nor a detailed knowledge of any period, so much as a generic conception of social organisation in its most notable types, a notice of the most important historical phenomena, and a more intimate idea of the past of his own nation; always, as far as possible, connecting the external, *de facto* evolution with the ideas and spiritual conditions which determine that evolution, demonstrating the continuity of social life, how each phase is determined by what precedes it, and will in its turn determine what is to succeed it. The history lessons must illustrate, supplement, and connect the historical elements of the other subjects, and must be especially closely connected with the geography and language teaching. The study of history affords valuable training to the memory and imagination in combining the elements of the past under the direction of different ideas, and to the moral will by the salutary example of human energy in the service of noble causes, inculcating a love of humanity by showing the worth and solidarity of mankind.

The value of mathematical training in developing the power of Mathematics. connected thought accounts for the large share of the school time allotted to it. Algebra is only begun in the fourth year, and up to then the arithmetic teaching should be practical and concrete.

The science teaching should, as far as practicable, approximate Natural and to the scientific ideal of direct observation, proceeding to a com- Physical Science,

parison of forms and to general notions of morphology and classification. In physics and chemistry experiments should be carried out by the pupils themselves. The time given to science lessons in each year is apportioned as follows:—

First, Second, and Third Years: zoology (34 lessons in each class); botany (26).

Fourth Year: physics (54); chemistry and general notions of mineralogy (43); elements of vegetable anatomy and physiology (23).

Fifth Year: physics (50); chemistry and elementary notions of geology (40); elements of human and comparative anatomy and physiology (30).

Sixth Year: physics (40); chemistry (30); more advanced vegetable morphology, anatomy, and physiology (23); animal morphology, anatomy, and physiology (27).

Seventh Year: physics (40); chemistry (30); zoology (26); botany (26); elementary mineralogy and geology (23).

Sixth Year: introductory conceptions, psychology, logic.

Seventh Year: morals, notions of metaphysics.

Philosophy. In order that the teaching may be adapted to its attainment it is important to realise the object with which philosophy has been included in the curriculum. It is to show the pupil, after the long course of study devoted to the instruction and training of his mind, the life of that mind itself, by giving him some idea of the nature and legitimate application of mental processes and methods. He should gain an insight into the forces which move the human world, comparable to that which in his previous studies he has obtained of those which move the physical world. And, finally, the philosophical teaching, by systematising all the philosophical elements of the other branches, and as the science of principle and duty, confers a higher unity on, and should be the finish and crown, the synthesis and explanation of the whole course.

Drawing. Drawing is strictly connected with geometry, the professor demonstrating and drawing the figure on the blackboard, which the pupils copy first with measurements and then at sight. The professor sometimes dictates a drawing line by line, the pupils drawing as he dictates. Correction of the pupils' drawings by the professor is strictly forbidden. As far as possible, the pupil should be helped to discover his mistakes for himself.

Entrance, class and leaving examinations. Candidates for admission to a *lycée* must send in the following documents:—a second grade or higher primary certificate, or a pass certificate of the *lycée* entrance examination, and a certificate that they have completed their tenth year. Each candidate pays a matriculation fee of twenty francs. The jury for the entrance examination consists of three professors chosen by the rector and

school council. There are class examinations between all the classes except the first and second, where the pupils pass up automatically if they have a majority of good marks during the last four months of the year. The juries of the class and certificate examinations consist of the professors of the respective classes, presided over, in the case of the two examinations for the general and complementary course certificates, by university professors nominated by the Government. In the oral examinations each professor examines in his own subjects, and also draws up the questions for the written examinations, which must be submitted to the school council. The candidates draw the questions by lot.

The rector is the head of the school ; he is appointed by Government from secondary professors not on the staff of the particular school or from higher school professors, and receives a salary of 2,500 francs in a central and 2,000 francs in a national *lycée*. He has the charge of the whole pedagogic, disciplinary, and financial administration of the school, and must see that the necessary unity of spirit is maintained in its working. In consultation with the school council and with the approval of Government he nominates teachers to fill temporary vacancies on the staff, and he has to publish an annual report of the working of the school.

Teaching
Staff.
Rector

He is president of the school council, which consists of all the professors on the staff.

School
Council.

Secondary school professors are appointed by Government after a written and oral examination in two parts ; one of which tests the general education of the candidate, examining him in Portuguese, universal and national history, geography, psychology and logic, and pedagogics ; while the second part is concerned with his aptitude in the particular subjects he aspires to teach. The juries for both examinations are appointed by Government, and consist of university and secondary school professors. Candidates must also present medical and birth certificates (that they are over twenty-one), certificates of character, and of having fulfilled all obligations of military service, and either a higher primary or secondary school certificate, or a university certificate in their special subjects. In the future they will also have to present the certificate of the university training course for teachers, which the Government intends to organise. Professors at central *lycées* have salaries of 3,000 francs, and at national *lycées* of 2,500 francs, except the professors of drawing, who receive 2,000 and 1,500 francs respectively.

Professors—
Appointment

Salaries.

The distribution of the work amongst the staff is made by the rector and school council ; each professor must teach two subjects, and he must not be required to give more than twenty-four lessons in the week. In each class one of the professors is appointed by Government, on the proposition of the rector, as form master. He

Form
Master.

Penalties. has to supervise the whole work of the class, both of teachers and pupils, hold frequent meetings of the class professors, and see that they all work together, and requisition and take charge of all teaching material and apparatus. Professors may be reprimanded by the rector either privately or before the school council, but they can only be suspended or dismissed by the Supreme Educational Council, and must be heard in their own defence. Each *lycée* has a secretary, who has charge of all documents and of the correspondence and accounts, and keeps the minutes of the school council. In national *lycées* one of the professors acts as secretary.

Secretary. Private secondary schools are recognised by Government, and can enter their pupils for the Government examinations under certain conditions. In order to obtain permission to open a school the moral and professional qualifications of head and staff, and the proposed plan of instruction must be submitted to the rector of the district *lycée*, and the building must be officially inspected. None but the officially-sanctioned text-books may be used in any school, and the school must at all times be open to Government inspection. The ordinary inspection of all the private secondary schools in a district devolves on the rector of the district *lycée*; he must watch over the whole interests of the scholars, including their food and the provision made for illness, and any changes in the staff or curriculum must be at once notified to him.

Private
Secondary
Schools.

THE UNIVERSITY OF COIMBRA.*

Portugal has only one university, which was founded in 1290 by the first sovereign who inherited the whole kingdom of "Portugal and Algarve," the same Don Denis who was the benefactor of secondary instruction. A bull of privilege was issued at the same time by Pope Nicholas IV. The first seat of the university was at Lisbon, whence it was transferred to Coimbra in consequence of town and gown riots in 1308-09, making subsequently many migrations between Coimbra and Lisbon before its final settlement at Coimbra in 1537.

The university has always been closely connected with the Crown, which, since the fifteenth century, is vested with the making of the statutes and the management of the university property. The appointment of professors lies with the "protector" of the university, who was generally a royal prince or the king. The present king is protector. Candidates are still obliged to deliver a public competitive lecture. The university has five faculties:—Theology (8 ordinary professorships); law (15); medicine (13); mathematics (8); and philosophy (8).

* Compiled from "Minerva: Jahrbuch der gelehrten Welt" and Rashdall's "Medieval Universities."

The academic year begins on the 1st of October, and in the year 1894-95 there were 1,429 matriculations: 47 in theology, 541 in laws, 148 in medicine, 118 in mathematics, and 386 in philosophy. The students still wear academic costume.

The university library has nearly 100,000 volumes; there are also institutes for normal and pathological anatomy, physiology and histology, and medical chemistry; chemical and physical laboratories, astronomical and meteorological observatories, a hospital, a musical institute, and geological, mineralogical, zoological, botanical, anthropological, and palæontological collections.

The magnificent old university building is most interesting and perfectly preserved.

TECHNICAL INSTRUCTION IN PORTUGAL.

Translated and abridged from "Enseignement Spécial Industriel et Commercial," by Carlos Adolpho Marques Leitão, from "L'Institut Industriel et Commercial," by Francisco Felisberto Dias Costa, and from the Official Regulations for Instruction in Fine Arts ; issued in connection with the Paris Exhibition of 1900 by the Portuguese Government.

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11

TECHNICAL INSTRUCTION IN PORTUGAL.

HISTORICAL INTRODUCTION.

Accustomed to depend on the markets of Castile, France, England, and the Low Countries, Portugal was for a long time susceptible to the reproach of lagging behind other countries in arts and industries. The adventurous life of soldier and mariner, navigation and commerce, seemed to be the national vocations, and until the middle of the seventeenth century there were no industries capable of employing any considerable number of hands.

The first technical schools were started on the initiative of the great Marquis of Pombal in 1757, and a little later the "Real Casa Pia" at Lisbon began giving manual training in various trades to the children in its orphanage. About the same time the Chamber of Commerce, on its foundation in 1755, was empowered by its statutes to organise a system of commercial training, and opened, in 1759, a commercial school for twenty scholars over fourteen, giving a three years' course of instruction in commercial arithmetic and accounts, the sole condition of admittance being a knowledge of reading, writing, and the four elementary rules of arithmetic. This school survived the Chamber, passing, on its suppression in 1834, under the direction of the Superintendent of Education for Lisbon.

First Technical Schools
1757.

First Commercial
School, 1759.

The general organisation of public instruction in 1836, due to Manoel da Silva Passos, inaugurated technical classes at the new State secondary schools, giving instruction in applied chemistry, physics, mechanics and natural history; and in 1844 the commercial school was annexed to the national *lycée* at Lisbon, the course being reduced to two years, and the curriculum widened by the addition of commercial geography and law, and political economy. The technical classes at the *lycées* had a short shrift, and Portugal had to wait till 1852 for the first systematic organisation of technical instruction. This was founded on French and German models. The instruction was to be practical and applied to all trades, and was organised in three courses: an elementary course of arithmetic, elementary algebra, and geometry and drawing; and two technical courses—a secondary course in the elements of applied descriptive geometry, chemistry and physics, model and machine drawing; and a complementary course in industrial mechanics and chemistry, industrial legislation and economics, and model and machine drawing. During the last two courses a laboratory training was given in chemistry and workshop instruction in metal and wood work. Technical instruction was placed and has remained under the control of

Technical
Classes at
the Secondary
Schools.

Reform of
1852 and the
Foundation
of the Lisbon
and Oporto
Institutes.

the Minister of Public Works, advised by a special council, of which he was president, consisting of the heads of the industrial and commercial departments of the Office of Works, of the Director and three professors of the Lisbon Industrial Institute, and of two members of the industrial section of the new Chamber of Commerce.

An industrial school at Oporto was established with the two lower courses and a higher course of applied chemistry, and an institute at Lisbon providing all three courses, equipped with a library and industrial museum and a staff of seven professors, and governed by three councils, one being charged with the scientific and one with the administrative direction, and the third with the management of the workshops and laboratories.

Reform of
1864.

The fact that commissions were executed for the public in the institute workshops led to a protest from the trades that its competition was harmful to them, and in 1859 the workshops were closed. The next step was the reform of 1864, which divided the industrial course into two instead of three sections—a general section for all branches, and a special section for the various trades. The theoretical instruction was to be given at the Lisbon and Oporto institutes and in local industrial schools to be founded in the different provincial towns; and the practical training in Government establishments, such as the arsenals, or in private factories by arrangement with the owners. In 1869 the commercial class at the Lisbon national *lycée* was closed, and a commercial section added to the Lisbon Institute, which was renamed Industrial and Commercial Institute, its work being modified and extended by a series of decrees during the period 1869 to 1898.

Progress in
1884.

Portugal shared in the general impulse given to technical education all over the civilised world about 1884 by the preparations for the proposed technical instruction congress in France, the industrial exhibition at Saint Petersburg, the development of technical schools in Belgium, Switzerland, and Italy, and the admirable report of the English Royal Commission on technical education of that year. Important reforms of the commercial and industrial sections of the Lisbon Institute were undertaken in 1884 and in 1886 respectively, and the latter eighties at last saw the provision of the local industrial schools, prescribed by a clause of the Act of 1864, which had until now remained almost a dead letter. Most of them began their careers as schools of industrial drawing, and, under the fostering care of the Government, which has neglected no means for their improvement, they have made steady and rapid progress, which even the financial restrictions of 1891 were powerless to retard. Starting with a total of 403 students, they had in 1890-91 2,168 regular and 3,943 free students.

Local Indus-
trial Schools.

The reform of the commercial section of the institute was due

to the energetic propaganda carried on by the distinguished professor of commercial accounts, Roderigo Affonso Pequeto, who persuaded the Chamber of Commerce to take up the matter, undertaking, if the Government would make the required reforms, to found three pecuniary prizes and organise a commercial museum. In 1886 the curriculum of the industrial section was reorganised and extended, the staff increased, and their salaries raised, class and leaving examinations were instituted and the standard for admission raised, and workshops and laboratories established.

In 1891 a reform of a very different tendency was enacted, with the sole object of reducing the expenditure. It met with a very unfavourable reception by the public as well as by the professors and students of the institute; and the former never rested in their efforts to obtain its revocation from the Government until, not satisfied with some not very vital modifications made in 1893, they succeeded at last, in 1898, in obtaining the regulations now in force.

Financial
Restrictions
of 1891.

ADMINISTRATION.

The whole system of technical instruction was reorganised during the years 1897, 1898, and 1899: the local industrial schools were dealt with by a decree of 1897: the regulations of the institute were remodelled in 1898, and the administration was reformed in 1899.

The decree of 1897 retained the original sub-division of the country, for purposes of technical instruction, into two areas—north and south—and appointed an inspector, nominated by the Government, to each area, charged with the supervision and direction of all technical and commercial schools. In 1899 the Council of Technical Instruction, established in 1852, was superseded by a new council, under the presidency of the head of the industrial and commercial department of the Office of Public Works, consisting of the directors of the industrial institutes of Lisbon and Oporto; of a senior professor from the industrial and commercial sections of both institutes, chosen by the Government; of three professors of science from some higher school, chosen by the Government; of the two inspectors of industrial instruction, and of the head of the industrial sub-section of the Office of Public Works, who acts as secretary.

LOCAL INDUSTRIAL SCHOOLS.

The object of the local industrial schools was defined by the decree of 1897 as being "to spread industrial training, to give

the workman the means of improving his position, to develop his intelligence, and increase the economic value of his work, and put him in a position to contribute on his own account to the increase of production." The new decree rather systematised the work of the schools than made any very radical change in them; it laid down a normal plan of instruction for all the schools, leaving them free to make such modifications as were required to meet local industrial conditions. The public elementary school course being quite inadequate as a preparation for the specialised studies of the technical schools, it was necessary for the latter to provide a preparatory course as part of their own curriculum. Each of the three industrial courses are therefore divided into two grades: a primary grade, with instruction in Portuguese, arithmetic, and geometry, principles of physics, chemistry and natural history, and elementary drawing, which provides the indispensable general foundation for the technical course which follows, and varies according to the special object of the training.

Courses.

There are three courses of instruction in the industrial schools: (a) industrial drawing; (b) trade course; (c) industrial course.

Industrial Drawing Course.

The industrial drawing course gives two years' instruction in elementary, and three in applied drawing for workmen and apprentices of both sexes. The elementary instruction is supervised by a Government commission, consisting of the inspectors of technical instruction and three professors from the industrial schools, who inspect the work of the year, and the examination drawings of two adult and two junior pupils in each school—(these drawings are collected at the industrial and commercial museum at Lisbon at the end of each year)—and draw up reports on the work, which are distributed to the Government and amongst the schools by the inspectors, and which are valuable in maintaining the quality of the teaching.

The Trade Course.

The trade course gives the manual training and the theoretical teaching in connection with it, which are indispensable to the proper preparation of young people for special trades. The special trades taught in each school vary according to the locality.

Industrial Course.

The industrial course is a continuation course for workmen and apprentices. Schools with only the first course are called schools of industrial drawing, the industrial schools have one or both of the other courses, as well as the drawing course. The following table gives the courses, and the special trade training given in the schools of the southern district in 1899.

Locality.	Name of School.	Courses.	Trades.
Lisbon	Marquez de Pombal	Three courses	Carpentering, Cabinet-making, and Wood Carving. Locksmith's Work. Decorative Painting, Weaving, Bookbinding.
"	Afonso Domingues	Drawing	Carpentering, Locksmith's Work. Decorative Painting, Plaster Casting.
"	Principe Real	Trade course	Women's Work.
"	Rodrigues Sampaio	Drawing	Women's Work, Goldsmith's Work.
"	"	Industrial	
"	"	Preparatory course for Industrial Institute.	
Covilha	Campos Mello	Drawing	Weaving and Women's Work.
Portalegre	Fradeso da Silveira	Trade course	
"	"	Drawing	Carpentering, Locksmith's Work.
Faro	Pedro Nunes	Trade course	Carpentering, Cabinet-making, Locksmith's Work.
"	"	Drawing	Rope and Fishing Tackle Making.
Leria et Batalha	Domingos Sequeira	Trade course	Carpentering, Locksmith's Work. Plaster Cast Making, Stone-cutting.
Funchal	Antonio Augusto de Aguiar	Drawing	
"	"	Trade course	Carpentering and Cabinet-making.

In the same district there are seven schools of industrial drawing, two of which give a lace-making course. Some schools have also a special course for ship's-engineers, and a course of technical chemistry. The ship's-engineers' course lasts four years, and it may be noted that the Marquez de Pombal school at Lisbon has already sent a large number of certificated ship's-engineers into the merchant marine, whose certificates were obtained after a practical and theoretical examination at the naval arsenal. The technical chemistry course begins with a two years' general course in theoretical and technical chemistry, after which the pupil specialises on the particular technical branch he wishes to take up. The length of this special course is not fixed.

Ship's-Engineers' Course.

Course of Technical Chemistry.

TIME TABLE.

Courses.	Subjects.	No. of Lessons in the Week.	Length of Lessons.
Industrial Drawing	Elementary Drawing { 1st year	6	1½ hours.
	2nd year		
	Architectural Drawing	3	2 "
	Machine " " " " " "		
Industrial and Trade	Decorative " " " " " "	3	1½ "
	Portuguese " " " " " "		
	Arithmetic and	3	1½ "
	Geometry " " " " " "		
	Geography and History of Portugal " " " " " "	3	1½ "
	General Geography " " " " " "	3	1½ "

TIME TABLE.—Continued.

Courses.	Subjects.	No. of Lessons in the Week.	Length of Lessons.
Industrial and Trade	French - - - - 2 years	3	1½ hours.
	Elements of Physics and Chemistry - - "	3	1½
	Elements of Natural History - - - - "	3	1½
	Physics and Industrial Mechanics - - - - "	3	1½
	Industrial Chemistry - - "	3	2

Manual work for male students never less than five hours a day, and for female students not less than three.

HOURS.

Day drawing class, 8 to 9.30 and 9.30 to 11.

Evening drawing class, 6 to 8.

Day trade course, male students, 9.30 to 12.30 and 1 to 3.

Day trade course, female students, 9.30 to 12.30.

Evening trade course, 8 to 9.15 and 9.30 to 10.45.

Laboratory work, 8 to 10.

These hours are of course modified to suit local conditions. In the drawing schools the lessons are generally given from 8-9.30 in the morning and from 7-9 in the evening.

During the first year of the trade course the teaching is made as individual as possible; after that groups of from two to five pupils work together. All practical work is done from drawings made by the pupil himself; the drawing follows the work from shop to shop, and is most valuable in keeping the work as a whole before the student all through the various processes it undergoes.

The instruction is gratuitous, but students make a deposit at the beginning of the school year, which they forfeit if they miss more than a certain proportion of lessons. Students in the chemical course pay five francs a month.

Leaving examinations are held at the end of each year.

School
councils.

The schools are managed by two councils: a school council, consisting of the director and all the professors, and a financial council, consisting of the director, the secretary, and one professor, elected annually by the school council.

Budget.

The schools are supported by an annual grant, the workshop earnings, the chemical students' fees, and donations from associations or individuals.

Staff.

The staff consists of one or two professors of drawing for the general course and one for each branch of applied drawing; a professor for each subject of the trade course, and one or two workshop directors. The professors are nominated by the King

after public examination. The annual reports of inspectors and directors are published in the "Technical Instruction Annual." As well as their purely educational function the schools serve to spread a knowledge of any new inventions or improvements in methods of manufacture in the local industry, by exhibiting them and testing them either for the Government or for private persons. A certain number of students are chosen each year by the Government for employment in the colonies—a most valuable means of ensuring a supply of efficient colonial workmen.

These schools occasion the Government an annual expenditure of nearly 60,000 francs, besides the very considerable sums spent on industrial museums and institutes. In spite of this large expenditure it has not as yet been possible to instal all the schools in properly adapted buildings. The Marquez de Pombal school, which was founded by the Lisbon municipality while it had control of the schools, is the only one which has buildings erected specially for it, but the Government building in which the Affonso Domingues school is installed is very roomy and well suited to the purposes of the school. The schools possess very valuable teaching apparatus, geometrical instruments, models of machinery and machines, scientific apparatus, casts for the drawing schools, and a very interesting collection of casts and models of national monuments.

Visits to factories, museums, and national monuments conducted by the professors complete the instruction given in the schools.

STATISTICS OF THE INDUSTRIAL SCHOOLS IN THE SOUTHERN DISTRICT, 1884-1899.

Years.	No. of Students.	No. of Candidates.	Examinations.	Passes.	Failures
1884-1885	409	409	206	206	—
1885-1886	441	546	406	394	12
1886-1887	493	898	380	377	3
1887-1888	635	1,135	408	401	7
1888-1889	1,094	2,444	998	982	16
1889-1890	1,445	3,126	1,196	1,164	32
1890-1891	2,088	4,589	1,803	1,776	27
1891-1892	1,780	2,613	972	891	81
1892-1893	1,684	2,577	872	842	30
1893-1894	2,604	4,850	1,900	1,616	184
1894-1895	2,866	5,571	2,271	2,091	180
1895-1896	2,809	5,092	2,587	2,384	203
1896-1897	2,911	5,672	2,969	2,288	262
1897-1898	2,230	5,388	2,626	2,220	406
1898-1899	2,283	5,839	2,666	2,167	499

LISBON INDUSTRIAL AND COMMERCIAL INSTITUTE.

The institute has two sections, a commercial and an industrial. The commercial section includes two courses, a secondary and a higher course, the elementary course being given at the Chamber of Commerce and subsidised by the Government.

Premises.

Teaching Material.

School Organisation and Curriculum

The industrial section has seven courses: chemical arts, electro-technics, mechanics, civil engineering and public works, mining, telegraphy, and a higher industrial course. Besides the technical subjects, instruction is given in mathematics, physics, chemistry, botany, mineralogy, geology, political economy, English, and drawing.

Each course consists of theoretical and practical training, six hours a week being devoted to the former, and drawing applied to the special object of the course. There are periodical repetition classes, either oral or written.

The practical training is given in the laboratories and workshops of the institute, or in private factories, or in Government factories, offices, custom houses, etc. The specialised industrial training is taken during the last two years. In order to obtain the certificates, the students, on the completion of the institute courses, must undergo a six months' apprenticeship in Government or private works (the telegraphists take it in the Post Office), during which time they are under the supervision of specially-appointed professors as well as of the heads of the works in which they are placed. The students of the commercial course take practical work in the commercial office at the institute, where they are familiarised with the ordinary routine of a business house.

The time-table and syllabus for all the courses is drawn up every year by the Government, advised by the school council of the institute. Examinations are held in all the courses at the end of the year. The diplomas of the civil engineering and public works, mining and telegraphy courses, entitle their holders to employment in the respective Government institutions, and the possession of the diplomas of the other courses gives the holder a preference over other candidates for any State employment connected with them. The diploma of the higher commercial course entitles to admission to the Custom House and Foreign Office, and to appointments as second-class secretary of legation and consul.

Examina-
tions and
Certificates.

Students.

Admission.

There are two classes of students—regular students, who take one or more complete courses in the regulation order and enter for all examinations; and occasional students, who choose what subjects they will take. The conditions of admission are the same for both classes—candidates must present a medical certificate that they are suffering from no infectious disease, and must have passed the entrance examination to a national *lycée*, and an examination at any official secondary school in Portuguese, French, geography, history, arithmetic and plane geometry, elements of physics and chemistry, elementary natural history, and geometrical drawing. The fifth year examinations of central and national *lycées* will in the future admit to the institute courses, but until the latest regulations of secondary instruction are completely operative, for an interval of five years from 1898-99, a special entrance examination will be held at the institute. Students pay a registration fee of one franc for each subject or part of a

subject for which they enter, the proceeds going to form a prize fund. There are also diploma fees of varying amounts.

The director of the institute is chosen by Government, and holds a Government commission, with a salary of 1,600 francs. Upon him devolves the superintendence and control of the whole working of the institute. Director.
Staff.

The teaching staff consists of twenty first-class professors, with salaries of 4,500 francs ; of four second-class professors for drawing and English, with salaries of 4,000 francs ; and an assistant professor in the commercial section, who ranks with the second class.

Professors are appointed by public examination, and serve a probationary period of two years before their appointments are made permanent. Five demonstrators assist the professors in the practical work, and have charge of the apparatus and material. The workshop for instruments of precision has a director of its own.

All the professors on the staff, with the director as president, form the school council, which aids the director in the scientific administration of the institute. Copies of the council minutes are sent to the Minister of Public Works at his request, or at the discretion of the director. The financial administration devolves on a second council, consisting of the director and two professors, chosen annually by the school council. The business staff consists of a secretary, a head clerk, a cashier, and two junior clerks. Councils.

The institute is still housed in the same building in which it was originally installed, which, in spite of repairs and alterations, is very unsuitable for school purposes. A large number of temporary buildings have been erected round it. The workshop for instruments of precision alone possesses a fine specially-erected building. Besides the library and scientific and technical collections, the institute possesses at present chemical, metallurgical, and electro-technical laboratories, the commercial office, workshops for wood and metal work, and for instruments of precision, and an electric lighting installation. The laboratory for testing building and engineering materials under the Minister of Public Works is annexed to the institute. All the collections, laboratories, and workshops have special Government grants, or a certain portion of the institute revenues apportioned to them ; they are all well equipped with the requisite apparatus, tools, machinery, and materials. Premises.

THE SCHOOLS OF ART AT LISBON AND OPORTO.

The school of art forms part of the Royal Academy of Fine Arts at Lisbon. It is divided into eight schools—drawing, civil architecture, historical painting, landscape painting, sculpture, steel and copper plate engraving, wood engraving, and industrial applications of the fine arts. The Sch.,
of Art at
Lisbon.

Each school must have an evening class for drawing from the nude or draped model.

The students are ordinary and voluntary; the latter are allowed a certain freedom of choice in their classes, but cannot be exempted from the examinations in the classes they select. Students of both sexes are admitted on the completion of their twelfth year, if they have passed a primary school examination, with an extra examination in French or a special entrance examination. Students can be admitted to the industrial school on passing an examination in reading, writing, and the four elementary rules of arithmetic, and French. French is not required of candidates for admission to the evening drawing classes for artisans. The Government awards three travelling scholarships for periods not exceeding five years.

The management of the school devolves on a director, selected by Government from the staff, and a school council of all the professors under his presidency.

There are nine professors, with salaries of 3,000 francs, and four assistants, with salaries of 1,500 francs. Professors are appointed by public examination for a probationary period of two years, after which their appointments are confirmed. The Government nominates the assistants, and reserves to itself the right of nominating distinguished foreigners to professorships. There is a secretary, who acts as librarian and cashier.

In 1898-99 there were 67 regular and 222 voluntary students in the school, and 235 students in the artisans' drawing class.

The Government grant amounts to 79,000 francs.

The School
of Art at
Oporto.

The school of art at Oporto has a similar organisation to the Lisbon school, but is on a much smaller scale. There are only four professors, with salaries of 2,500 francs.

THE LISBON SCHOOL OF MUSIC.

The Lisbon School of Music is divided into two schools—vocal and instrumental music and composition; drama.

Each school has a director, and the whole institution is managed by an inspector. There are nine professors of the first class, with salaries of 2,500 francs in the music school, and two in the dramatic section, besides auxiliary professors and assistants, and an Italian master, who receives 1,000 francs.

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HUNGARIAN EDUCATION.

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HUNGARIAN EDUCATION.

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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HUNGARIAN EDUCATION.

"Magyarország nem volt hanem lesz" (Hungary has not yet been, she will be).—SZÉCHENYI.

"What we teach our children is not half so important as how we teach them. The things we learn in school, we in a great measure forget, but the influence of a good educational system remains for ever."—EÖTVÖS, (First Minister of Education in Hungary, 1848).

English-speaking people are curiously ignorant of the proud, free nation occupying the plains in the east of Europe. Hungary is larger than the United Kingdom, its area being about 125,000 square miles. Its population is about 18,000,000. The Hungarian Nation.

Since the days when the Hungarians, under their leader Árpád, came from the steppes of Asia, more than a thousand years ago, and took possession of the rich Danube lands, they have remained unconquered, and have retained their nationality and their language in spite of the attempts of the Turks, the Slavs, and the Germans to subdue and denationalise them. The Magyars are the ruling race of Hungary, they form about half the population. Among the sixteen other nationalities making up the kingdom are Germans, Roumanians, Croatians, Servians, Bulgarians, Slavs, Ruthenes, Italians, Armenians, Gipsies, and others. These races differ in language, dress, manners, and habits, and they form separate settlements in various parts of the country. The Roman Catholic is the predominating religion. There are also Greek Catholics, Evangelicals, Reformed Church, Unitarians, and Jews. Owing to the variety of races and languages, the task of organising education has not been easy. The civil wars of Hungary also impeded educational progress in earlier times. Before the advent of Maria Theresa little was done to organise education. The Latin tongue, which the introduction of Christianity in the eleventh century made the official language, was the medium of instruction in the schools. Latin has remained a spoken language among cultivated people in Hungary, in a diminishing degree, until the present time. Old Hungarians still occasionally address English strangers in Latin. More than once friendly Hungarians, ignorant of German, whom I have met on a Danube steamer, have described to me the fortresses and cathedrals on the banks of the Danube in the Latin tongue. Once a tram conductor, whom I addressed in German, replied in Latin, and asked me to use that language. Maria Theresa seriously undertook the organisation of education in Hungary. She appointed a commission to enquire into the state of the schools. She divided the country into districts. She caused normal schools to be erected in each district, and she made efforts to have common schools established in every parish, in which reading, writing, and German were to be taught. Hungarian Mixed Races and Religions.
Latin in Schools.
Maria Theresa.

German in
the Schools.

Struggle for
National
Language.

Humanistic
Tendency of
Education.

zeal for education profoundly influenced public opinion on the question. Her son, Joseph II., unfortunately for education, had an antipathy towards the Hungarian language, and among the reforms which he attempted to force on the country he tried to insist on the exclusive use of German in the schools. During the Napoleonic period Hungarian schools degenerated; the Hungarian language was neither spoken nor taught. Educational progress in Hungary has been constantly checked by the repeated attempts of the Austrian Government to substitute German for the national speech. Count Széchenyi, whom Kossuth called "the greatest Magyar," was keenly alive to the importance of a national education for the Hungarian people. "The power of a nation," he says, "lies in the number of educated heads it contains." He was mainly instrumental in founding the Academy of Sciences, early in the nineteenth century, the chief object of which was the cultivation and development of the Hungarian language. The language of instruction in the schools at the present time is Hungarian. Perhaps this constant patriotic struggle to give Hungarian language and literature its proper position in the schools, along with the imperative necessity which exists for teaching other languages, has made the education in Hungary too literary and linguistic in character.

The recent alterations in the new curriculum—*tan-rend*—for Secondary Schools demand more extensive reading in literature and history, and increase the time devoted in school to modern languages; but, on the other hand, chemistry and drawing receive more attention, and the time devoted to translations of Hungarian into Latin is considerably decreased, so probably the balance is restored.

It has been urged that for a romantic and chivalrous race like the Hungarians a severe and practical, rather than a humanistic, education is needed. The English visitor, accustomed to the formal and utilitarian standard of English Schools, is filled with admiration at the enthusiasm and interest which the literature and history teaching arouses in Hungarian schools of all grades. One is constantly reminded of Thring's saying as one talks to Hungarian school children: "The transmission of life from the living through the living to the living is the highest aim of education." Hungarian school children love their country with a passionate patriotism, which their school instruction keeps warm and vital. Before considering in detail the two epoch making Education Acts of 1868 and 1883, which have done so much for Hungarian Schools, it may be well to summarise some of the features in the Hungarian Educational System, which the English visitor cannot fail to admire.

Brief
Summary.

1. The complete absence of any religious difficulty. The State requires a certain amount of time to be devoted weekly to religious instruction. Special teachers give this instruction in non-denominational Schools, without rousing bitterness.

2. Organising, governing, and examining bodies contain a fair proportion of practical teachers, consequently all difficulties are

met with practical insight. The chances of promotion to higher office help to give an inspiring flavour to the teacher's profession. The experiment of a consultative committee of experts to advise the Minister of Education, which is about to be formed in England, has been in successful operation for years in Hungary.

3. The examinations are chiefly oral, therefore the examining bodies are able to judge more justly the powers of individuals. Constant written examinations encourage the worst evils of cramming, and at best written examinations only test about a third of the pupil's powers.

4. All grades of teachers are carefully trained for their profession. There are training schools for teachers of kindergartens, and training schools for the professors of Secondary Schools.

5. Teaching is a profession, and the women who enter it are recognised equally with men. The salaries and pensions of men and women teachers are equal, and marriage on the part of a woman does not debar her from continuing her profession.

6. The teaching appears to be largely humanistic and tends to inspire patriotism, encourage literary tendencies, and love of learning. To English teachers, who deplore that our educational methods do not foster a love of literature, and, consequently, there is an absence of the ideal in our school instruction, this enthusiasm aroused in Hungarian schools compels admiration.

7. The children's attendance at school is excellent. The parents recognise the advantages of education and are anxious to co-operate with the State and with the teachers in furthering the welfare of their children. Fines for non-attendance are rare. The holidays are carefully arranged to suit the convenience of parents who require their children's labour at busy seasons like the vintage and the harvest. Contrary to our system, the Primary School holidays in Hungary are longer than the Secondary School holidays.

8. Finally, in considering the life-product of the educational system—the children themselves—a stranger cannot fail to be struck by their eagerness to learn, their quick sense of humour, amazing retentive powers, intense patriotism, extraordinary facility for acquiring languages and charming manners.*

After the political changes of 1849 the elementary education of Hungary, which hitherto had been in the hands of various ecclesiastical bodies, began to receive attention. Teachers were sent for from other countries, and attempts were made to extend the subjects of instruction. When Hungary became again esta-

Act of 1868.

* At the end of this report, before the Appendices, will be found a map showing the percentage of the literate population in Hungary and her dependencies in 1890. The map is based on that contained in the "Hungarian Great Lexicon Pallas" (1896 edition).

blished as a separate kingdom, primary education was taken seriously in hand, and the famous Elementary Education Act of 1868* was passed.

To introduce supplementary non-denominational schools, without disturbing those previously existing, and to establish State control over all Schools, was a task which required sympathetic management. A survey of the Act of 1868 will show how wisely the various difficulties were met.

The following is a brief survey of the famous Act of 1868 regarding Elementary Education.

All parents and guardians are compelled to send their children to school from their 6th to 15th year, unless special arrangements are made for home education. Until the 12th year the child must attend an Elementary School, and until the 15th a Revision School, unless he has entered upon a course of Secondary Education. Fines are enforced in cases of non-compliance with this regulation, which are doubled in amount for each successive offence.

Parents may choose the schools for their children, or they may educate them at home. In the latter case parents are required to show a certificate to prove that their children are being properly educated, and the children are required to attend annual public examinations in the public schools. Children who are feeble-minded, or otherwise mentally defective, are not allowed to attend the Public Schools.

The institutions which come under the Elementary Act are:

- (1) Elementary Schools (Népiskolák).
- (2) Higher Elementary Schools (Felsőbb Népiskolák).
- (3) Citizen Schools (Polgáriiskola).
- (4) Normal Schools for Teachers.

These institutions may be public or private, and they may belong to ecclesiastical bodies, private individuals, societies, communities, or the State.

All religious bodies may possess public institutions under this Act. They must supply the funds, and they have the power of directing religious instruction, appointing teachers, choosing school books, and deciding the methods of instruction, provided that they observe the regulations respecting the buildings and offices, the separating of boys and girls, the number of children under one teacher, the qualifications of teachers, and the subjects of instruction enforced by law. The obligatory subjects of instruction are Religion and Morality, Reading and Writing, Arithmetic, and Ordinary Arithmetic, Weights and Measures of the Metric System; Grammar; Conversation and Memory, Elementary Natural History, with special attention to the history of Hungary; Geography and History of Hungary; Agriculture; and Agriculture; Laws and Duties of Citizens; and Gymnastics and Military Exercises.

The school must be properly provided with blackboards

* L. XXVIII. (statute) xxxviii., v. J. 1868.

globes, maps, natural history pictures, diagrams, and all necessary apparatus.

The minimum school year must be eight months in villages and nine months in towns.

Religious bodies may establish and own Teachers' Normal Schools, providing that these institutions be attached to a practising school, that the full curriculum of the State Normal Schools be adopted, that the students attend a yearly public examination, the results of which be forwarded to the Ministerium, and that the final Diploma Examination be conducted in accordance with the regulations.

Normal
Schools
established
by Religious
Bodies.

Institutions in connection with religious bodies are under the State Inspector, and if all the State regulations be not faithfully carried out, the Government has the power to close them and substitute others in their place.

Individuals and societies may establish institutions for elementary education, provided the persons directly concerned in the work are properly qualified. Institutions founded and directed by private individuals or societies may be either considered public or private; in each case they must conform to the Government requirements and submit plans of organisation and schemes of study to the Government officials.

Institutions
conducted by
Individuals
and Societies.

Annual public examinations must take place in all these institutions. Very excellent and necessary private institutions may receive moral and material aid from the Government. Schools and institutions which are not satisfactory may be examined and closed by the Government.

In districts where religious bodies have not established schools, the Community is compelled to provide them. Schools provided by the Community are non-denominational in character. The various religious bodies of a mixed community may unite and build a handsome common school, instead of keeping up little denominational ones, in which case the religious instruction is given by special external teachers from the various sects. Exact details of space, light, ventilation with regard to the building, and the separating of boys and girls, are specified in the Act.

Community
Schools.

Poor children receive books gratis. Teachers are paid by the Community. One teacher may not teach more than 80 children at the same time.

The Community bears all expenses, and it has the power of levying a separate school tax if necessary. All Communities are required to establish a school endowment, and to make it increase from year to year. In cases of need the State Treasury may be drawn upon, a certain portion of the Budget being set apart for the support of Community Schools.

If in a district provided with a Church School there are thirty children of another faith, the Community is compelled to establish a school for them. If the number be under thirty, the children must attend the Church School, and extra religious instruction must be provided for them.

Educational
Provision for
Children of
Different
Religions.

Two Courses
of Elementary
Instruction.

Elementary education is divided into two parts:

- (a) Elementary Education from 6 to 12. Child attends daily.
- (b) Revision School, from 12 to 15, the child attends for certain hours weekly.

All children must pass through the six classes of an Elementary School, with the exception of those who, after four years' attendance at ten years of age, enter the lower classes of a school of a higher grade.

Children of 12 years of age, having passed through the six years' course of an Elementary School, must attend a Revision School until they are 15 years of age. All school fees are remitted when poverty is pleaded.

Time spent
in School
weekly.

Children in the Elementary School must attend at least 20 hours, and at most 25 hours weekly. This time includes Religion but excludes Gymnastics and Gardening.

Children must spend at least 5 hours weekly in winter and 2 hours weekly in summer in the Revision School. In addition to the usual holidays, children over ten are permitted to attend only Sunday School, for a period of not exceeding two months, at the busy seasons, like the vintage, harvest, etc.

The curriculum in the Community Schools is a little more extended than in the Church Schools; it includes General Geography and History, practice in speaking the mother-tongue, and often a second language.

The plan of studies is modified from time to time by the Minister of Education.

Language.

The language of school instruction must be the child's mother-tongue; and, in districts where various languages are spoken, teachers are chosen who can speak several languages.

Higher
Elementary
Schools.

Towns of 5,000 inhabitants or more must establish a Higher Elementary School, or a Citizen School.

The Higher Elementary School provides a three years' course for boys and a two years' course for girls. Pupils must present certificates to show they have passed the six-year elementary course. In addition to the subjects taught in the Elementary Schools, Penmanship and Drawing, Hungarian as a second language in districts where Hungarian is not spoken, Higher Arithmetic, Geometry, with special reference to practical work, Outlines of Rural Economy, Simple Bookkeeping, and the Hungarian Constitution are taught to boys. Girls learn Hungarian if necessary, Needlework and Embroidery, Physics and Natural History, with special reference to gardening and women's occupations. At least 18 and at most 20 hours weekly must be spent in the Higher Elementary School.

Citizen
Schools.

Larger communities must establish Citizen Schools instead of Higher Elementary, if they possess the means. These schools provide a six years' course for boys, and a four years' course for girls. Pupils must present a certificate to show that they have passed through four years of an Elementary School course. Boys and girls must be separated; one teacher may not teach

more than 50 pupils at a time. The pupils must attend school at least 24 hours, and at most 26 hours weekly.

To the subjects included in the Elementary plan of studies Style and Literature, Hungarian and German Languages, Commercial and Statistical Arithmetic, Chemistry, Elements of Law Drawing, and Fencing are added.

French, Latin, Music, and other subjects are taught in addition to the obligatory subjects, according to the means and wishes of the Community.

The Minister of Education has the power to establish schools at the cost of the State whenever it is necessary.

Training colleges must be connected with a Practice School, in which the theories laid down may be put into practice. Normal
Schools for
Men.

They must have gardens, where the students may receive practical instruction in Agriculture, and in Fruit and Vine growing.

Students must be healthy, and be over 15 years of age at the time of entrance. They must have passed through at least four of the classes of a Secondary or Citizen School.

The course extends over a period of three years. The obligatory subjects of study are Religion, Pedagogy, School Method, Geography, History, Mother-tongue, Hungarian,* German, Natural Science, with special reference to Agriculture, Rural Economy, Gardening, Agriculture, Constitutional History, Mathematics and Geometry, Singing and Music, especially violin and piano playing, Gymnastics, practical experience in teaching.

Students must be 14 years of age on entering a Training College for Women, and must have passed through the Higher Elementary School. The course lasts for three years. The obligatory subjects of instruction are Religion, Penmanship, Drawing, Mother-tongue, Grammar, Hungarian language, German language, Geography, History, Pedagogy, Arithmetic, Physics, and Natural History, with special attention to woman's work and Cookery, Singing, Domestic Economy, Needlework, Practical experience in teaching. Normal
Schools for
Women.

There is no fee for instruction. The students who live in the Institute pay a moderate price for board and lodging.

Students are examined each year. At the end of the course a final examination takes place, upon the passing of which the student receives a diploma.

It is interesting to remember that this famous Elementary Education Act was passed in Hungary before universal education became compulsory in England.

The school buildings in Hungary, particularly in Budapest, are handsome, and are provided with all modern conveniences. I was taken into the basement of a school for 1,000 boys and girls, and the hot and cold water baths and the shower baths were shown to me. Towels, and oil-skin caps for the girls, were provided, and an old woman was in attendance to assist the children in their washing operations. I was told that the parents approved of the baths, and that the general standard of School
Buildings.

Baths.

* In cases where it is not the mother-tongue,

cleanliness had improved since their introduction. Many of the schools have a gymnasium, fitted up with ropes, ladders, balls, skipping ropes, basket ball, &c. There are playgrounds attached to many of the schools, and playing spaces in the corridors to be used in wet weather. School gardens are a necessity, as the boys receive practical instruction in gardening, fruit and vine growing, &c. The 5th and 6th classes work in these gardens for two hours weekly. The village schools are often old-fashioned, and furnished with big uncomfortable old desks and primitive blackboards, but even in these schools were excellent maps and modern arithmetical apparatus. Boys and girls are taught separately whenever it is possible. In schools attended by both sexes, the boys are taught in separate classes by men teachers, and the girls are in charge of women teachers.

Mixed
Schools.

Size of
Classes.

School
Museums.

The law does not allow more than 80 children in a class. The size of classes varies. I have seen classes of 36 and 40, and of 80 and 90 children. All schools contain a museum. In the larger schools this is a room set apart and filled up with glass cases, cabinets, drawers for moths, beetles, butterflies. The museum contains stuffed animals and birds, specimens of plants, and mineral and fossil specimens. I have seen stuffed eagles, monkeys, tigers, and sharks among the specimens. The schools are provided with chemical and physical laboratories, which are well fitted up.

School
Libraries,
Studios, and
Chapels.

School libraries, a teachers' room, and a conference room are also a part of the usual school building. In many schools there is a studio for the drawing and painting, and a chapel where daily service is held. This is a characteristic part of Roman Catholic Schools. In Jewish schools it is common to find a chapel for Saturday services.

Influence of
National
Life.

The walls of the class rooms are hung with pictures of Hungarian life and history, as well as pictures of natural history. The national life of Hungary profoundly influences the school instruction. The aim of the school is to train Hungarians, and all concrete aids are employed. Among the characteristic Hungarian pictures which adorn the walls of all schools are *puszta* (plain) scenes. A very familiar one is the Hungarian well with its upright beams standing out against the endless plain, and the groups of peasants with their water-pots and wine-jars, and herds of cattle watering there in the twilight. Then there are pictures of *csikós* or cowboys, in their characteristic costume; market towns with peasants in sheepskins buying and selling; Hungarian huts showing quaint interiors, and painted wooden furniture, with embroidered pillows on the bed piled up to the ceiling. The Hungarians love their plains as a Highlander loves his mountains, and in the Hungarian poets, particularly Petöfi, to whom the plains suggested a number of exquisite poems, we get many allusions to them. The Hungarian children learn and love these poems. "You have seen our Danube and now you must see our plains," said a school child of ten to me, pointing out a picture on the class-room wall.

Vineyards, Wine-pressing Scenes, Wheat Fields, Maize Fields,

Tobacco Plantations, Ploughing, Harvesting, Boar-hunting, Horse-racing, and Danube floating Water Mills are among the pictures found in the lower class-rooms, along with historical pictures showing incidents in the lives of Hungarian heroes. The Kindergartens, too, are greatly influenced by the National life.

The Needlework done in the Schools and Training Colleges Needlework. appears to be excessive, and injurious to the eyesight on account of its fineness, but here again one finds traces of the National life in the characteristic Hungarian embroidery. The peasants invented the designs, which are variations of the tulip, the acorn, and the eye of the peacock's tail. These designs are boldly worked in blue and red on coarse canvas and the effect is very striking. The specimens of needlework and embroidery work I saw in many of the girls' schools led me to hope that the movement for Girls' Higher Education would have the effect of lessening the amount of fine embroidery now done in the schools. It is considered womanly to strain the eyes over delicate materials and microscopic stitches. Once we had a similar opinion, but we have grown wiser. There was a good deal of very practical work in the schools in the way of Knitting, Mending, Darning, and Making, but the fine embroidering of monograms on linen, the French designs on silk, the Chinese designs on silk gauze and ivory embroideries looked so delicate that it seemed incredible that fingers had touched them. The girls were in many instances convinced that the old Hungarian peasant work was much more sensible.

In one school they showed me specimens of old Hungarian patterns and said, "We like it so much better than modern needlework." Among the striking educational exhibits in the Hungarian Exhibition in Budapest, 1896, were the needlework and embroidery from the Girls' Schools and Training Colleges.

I saw a good deal of excellent Chip-carving, Slöyd and Clay Modelling from the Boys' Schools and Training Colleges.

The visitor to Hungarian Schools cannot help being impressed Language Teaching. by the Language Teaching. The national speech is thoroughly taught throughout the school, and in the 3rd class from the bottom the teaching of a second language begins. In districts where Hungarian is not spoken, Magyar is the second language. In Hungarian-speaking districts, German is taught from the 3rd class upwards.* I believe Hungary is the only country in Europe where a second language is a recognised part of elementary instruction. During the Exhibition of 1896 I was visiting a Training College for women teachers, in which much confusion prevailed. In apologising for the state of affairs, the teachers explained that 90 little girls had just arrived in company with their teachers from a district where Servian was spoken. The children were to be taken to the Exhibition, and the Training College was to house them all during their visit.

The Schools and Colleges in the capital were used as hotels for the country teachers and children who flocked to the

* The classes are numbered from the bottom of the school.

Exhibition aided by the Government. The children were chosen on their ability to speak Hungarian, and the 90 little girls were examined by the College teachers in this language on their arrival. I watched a German lesson in a Budapest School which I visited with the Inspector in 1899. The class consisted of 60 little girls of 8 years of age in Class III. The lesson was conducted in German. The children read a simple story of the fox and the eagle, and discussed it with the teacher. The Inspector held a conversation with them in German; sometimes he had to make explanations in Hungarian, but on the whole they understood him.

Girls'
Education.

Until 1895* and 1896† all Girls' education in Hungary came under the Elementary Education Act. The large educational establishments in the towns devoted to the higher education of girls are graded in the following manner:—

4 Elementary Classes. Pupils from 6 to 10.

4 Citizen (Polgari) Classes. Pupils from 10 to 14.

Sometimes—

6 Higher Girls' Classes. Pupils from 10 to 16.

4 Training Classes for Teachers in the Elementary Schools.
Students from 14 to 18.

5 Training Classes for Teachers in Higher Elementary
and Citizen Classes. Students from 18 to 21.

The language and literature teaching is often extremely good in these schools. Of modern languages, French and German are taught and sometimes English. It is common for rich families to have an English governess merely to speak English to the children. There are at present, in Budapest alone, between three and four hundred English girls so employed. It is not a desirable position. The children all go to school, or have Hungarian teachers to prepare them for the public examinations, and the English girls' duties are usually to walk with their pupils to school and to talk English to them at home when they are not engaged with other lessons.

English
Examination
in Hungary.

I was present at the oral public examination in English in the 4th class of a Girls' Higher School. The pupils were 14 and had been learning English for one year. There were perhaps 50 girls present; they were dressed as for a festival in white gowns and coloured sashes. The hall was crowded with parents and friends. The entire examination was conducted in English.

"Why do you come to school?" asked the examiner of the first girl. "We come to school to learn. We learn Arithmetic, Algebra, Geography, History, Drawing, Singing, and other things. We also learn to play the piano," was the reply.

"How do you write a letter?" was another query. The second girl replied, "I sit down, I take a note-paper, I take a pen. I write my thoughts. I put the note-paper in the envelope, then I affix a stamp, and I send my letter to the post."

The reading-books were opened at random by the examiner, and a third girl was required to read the story of the boy that

* Universities opened to women.

† Girls' gymnasium established.

liked play. Another girl was required to relate the story of the Husbandman and the Wolf, which she did in very exact language. One child recited Kingsley's poem, "I once had a sweet little doll, dears," after which she gave a correct little biography of Kingsley. Another recited Tennyson's "What does little birdie say?" and a third recited Longfellow's "Rainy Day." Various questions on grammar were answered, such as the plural of boy, child, foot, window, &c., comparisons of adjectives, conjugations of verbs, &c. I was told that the Direct Method was used in the early stages of teaching languages. The examiner was a Hungarian lady who had lived for some years in England. She spoke so perfectly that it was almost impossible to tell that she was not English. Only English was spoken during the whole examination, which lasted about an hour and a half. Literature is associated with the language teaching from the earliest stage. The following gives the chief contents of the German reading-books used during the first three years of instruction in German.

1st Reading-Book—

1. Selections of stories from Grimm and Lessing's fables.
2. German and Hungarian sagas. (*Siegfried* and *Attila*.)
3. Greek hero sagas.
4. Poems from Uhland, Rückert, Müller, &c.
5. German proverbs, epigrams, and riddles.

2nd Reading-Book—

1. Fables and stories from Bechstein, Grimm, and Lessing.
2. *Legend of William Tell*.
3. Stories from Herodotus and stories from Egyptian History.
4. Stories of Mahomet.
5. Stories of the Crusades.
6. Poems from Schiller, Rückert, Uhland, &c.

3rd Reading Book—

1. Stories from Bechstein, Herder, Hebel, &c
 2. *The Nibelungen*, of Uhland.
 3. *Alexander the Great*, by Bässler.
 4. *Roland in the Ronceval Valley*. Klopp.
 5. *King Frederick at the Kyffhäuser*. Bechstein.
 6. *The Singers of the Wartburg*. Richter.
- Karl the Great*. Rückert.
How the Hungarians won their Land. Markus.
William the Conqueror, according to Norman Chronicle
The Maid of Orleans.

These literary extracts open up the culture of bygone ages, and help to deepen the historical interest of the children, and present as well models of style, and prepare the way for a more thorough study of literature in the higher classes.

The buildings of the Normal Schools for women teachers impressed me greatly. I found ten or twelve piano-rooms in

Normal
School
Buildings

some of them, for Music is considered an essential qualification in a teacher. The studios for Drawing and the lecture-rooms and laboratories for Chemistry and Physics in these institutions were admirably arranged and fitted up. For recreation and exercise there was a Gymnastic Hall fitted up with Stilts, Clubs, Balls, Skipping-ropes, &c., and there was always a concrete courtyard capable of being flooded in winter for skating. Dramatic representations of classical plays is a favourite amusement in these institutions, and one rarely finds a Normal School that is not provided with a stage and theatrical conveniences. In the spring and summer there are plenty of walks and excursions.

Kindergarten.

The Kindergartens of Hungary are among the best in the world. They may be classed with some of the Swiss and American Kindergartens in point of excellence. Their history is interesting, and it is gratifying to find that the Hungarians attribute their earliest efforts in the training of little children to English influence. Early in the nineteenth century the Countess Thérèse Brunswick came to England, and was profoundly impressed by the infant schools of Wilderspin. She had previously spent some years at Yverdon, and had become acquainted with the methods of Pestalozzi. She returned to Hungary eager to organise infant education in her native land; the moment was ripe for the attempt, for Count Széchenyi had already begun his reforms, which ended in the creation of modern Hungary. The Countess of Brunswick secured the co-operation of powerful sympathisers, and succeeded in establishing in Buda in 1828 the first infant school. Others quickly followed, and an association was founded in 1836 for the purpose of carrying on infant education, of which body Louis Kossuth was a member. These schools were at first called "angels' gardens," but the influence of Froebel soon made itself felt in Hungary, and the infant schools took over the name and methods of the Kindergarten. A Normal School for training infant teachers was founded as early as 1837. The German idea entirely dominated the early Kindergartens, but the Hungarians were not slow to recognise the futility of slavishly following German traditions, and they soon succeeded in making their Kindergartens purely national in character, while retaining the spirit of Froebel's teaching. In 1875 the Kindergartens were recognised by the State as a definite branch of public instruction.

In 1891, according to the Act* for the training of little children, attendance at a Kindergarten is compulsory for all children between the third and sixth years. This regulation is more strongly enforced in the country and villages than in the large towns, where facilities exist for private tuition. The language, songs, and games used in the Kindergarten are now entirely national in character.

Village Kindergarten.

I visited a village Kindergarten this year (1899). The village lay among vineyards in a celebrated wine district on the Danube.

* Statute xv. 1891.

In front of the building was a large canvas tent covering a great patch of sand, and here, sheltered from the sun, were fifty bare-legged mites playing. They played games which were characteristic of the district. There was a Wind game, and the children imitated the wind which blew the boats along the Danube. There was a game of making wine-casks. Groups of children formed the casks and the other children walked around hammering in imaginary nails, while other children cut down imaginary trees to make the casks. There were 150 children in this Kindergarten. They were all in charge of one qualified teacher and her little maidservant. Everybody admitted that the staff was small, but they urged that it was a poor district. The town Kindergartens are well staffed and fitted up with all necessary apparatus. The influence of Hungarian life and history is shown clearly in the Kindergarten games and songs. One game represented the shepherds taking care of their herds on the plains and guarding them from the wolves which come down from the mountains. Traces of the Hungarian struggles with the Turks come out in these games. Weary soldiers march to fight the Turks, and they halt at a village, footsore and hungry. The village rouses into activity, and the baker, the wine-presser, the housewife, the tailor and the shoemaker, all set to work to feed, clothe, and house the soldiers.

Influence of
National
Life on
Games.

The Kindergarten pictures and occupations all show the influence of the national life. There is very little prepared material; ordinary carpenters' shavings, which the village children bring from the carpenters' workshops, are made into characteristic wells, buckets, wagons, riddles, sieves, etc. Straw is used to make beehives, bags, baskets, and frames. Walnut-shells, and old matchboxes and corks are made into scales, windmills, Hungarian carts, ploughs, chairs, tables, spinning-wheels, water-mills, houses, fences, wells, and in one instance I found a whole Hungarian model village made without any elaborate material. In the town Kindergartens the classes were much smaller than in the villages. I found a class of five-year-old children sitting on benches out-of-doors under the acacia trees, building with Gift III.; they smiled at us and cried out "Isten hozta" ("God has brought you"), and they showed the bridges to cross the Danube, the wells to get water on the plains, the mills to grind corn, etc., which they had built. "Isten velè" ("God be with you!") they cried to us in chorus when we left them. In connection with some of the Kindergartens in Budapest are classes for training Kindergarten teachers. These must be trained for two years. Candidates must have passed the four classes of the Citizen Schools. They must be over fourteen years of age and possess a clear voice and a good musical ear. They must be well formed and healthy and have patience and sympathy with little ones. Their studies include Languages, Literature, Physics, Chemistry, Hygiene, Psychology, Method of Teaching, Geometry, Drawing, Songs and Violin-playing. All the Kindergarten teachers play the violin. In the Kindergarten games and songs the teacher is leader; she marches first, playing

her violin, and the children follow singing. However large the classes are in Hungarian Kindergartens—and I have seen classes of seventy children—they all join in the game, the teacher leading them and playing the music. In English Infant Schools it is very common for ten or twenty children to come out and sedately play the game, while the rest sit still in the desks and watch. This is a relic of the old idea of school discipline, which will not admit natural play as a part of schoolroom life. A Kindergarten teacher in Hungary is not considered qualified until she is 18; if her training be completed before this age she is regarded as a helper. I spent a day in a Kindergarten Teachers' Training School during the examinations. These were chiefly oral. A committee of ladies and gentlemen sat listening as the examiner put questions to some of the candidates on the pedagogy of Comenius. In the garden we found some 20 girls with their violins practising the national songs of Hungary. They marched round the garden singing and playing in chorus, until they were called in to meet the examiner. All Kindergartens must have open playing spaces, shaded with trees. Children under three may be admitted, but, as the regulation quaintly state, "not in swaddling clothes."

Secondary
Education.

The Secondary Schools of Hungary during the two previous centuries were chiefly in the hands of the Jesuits, and the instruction was given in "bad Latin." Admirable as this method was for shutting the pupil off from living knowledge of the world and mankind, it was bad for educational progress, and bad for the national language and literature. The study of Greek was totally neglected, which, as Dr. Reich points out, made matters worse. For Hungarians, "naturally inclined as they are to grandiloquence and redundancy, both of words and thought, the study of Latin literature, untempered by that of Greek, was in many ways harmful." Latin ceased to be the official language in 1825, and, as we have seen, Count Széchenyi and patriots like himself laboured strenuously to make Hungarian the national speech.

Teaching of
Greek in
Secondary
Schools.

In 1849 Greek became a compulsory subject in the Gymnasium (classical school) from the 3rd to 8th class.* In 1860 the number of hours devoted to Greek were reduced, and later the subject was left for the Inspector to decide whether it should or should not be taught. In 1871, Minister Pauler introduced it again as a compulsory subject in the State Secondary Schools, and this remained in the Act of 1883. The agitation against the compulsory teaching of Greek which arose afterwards was the result of an attempt to remove the sharp distinction between the Gymnasium and Realschule. It was urged that the removal of the compulsory teaching of Greek would be the first step in unifying the two schools, and of merging their ideal and practical aims. The question of the teaching of Greek in the Secondary Schools was discussed in Parliament in 1889 for nine

* The classes are numbered from the bottom of the school. One year is spent by the pupil in each successive class.

whole days, the ultimate decision being that the language must be sacrificed.

Historical Sketch of Secondary Education in Hungary.

The State issued a command during the time of the great Hungarian Exhibition in 1896, that every Secondary School should write and publish its own history from its early beginnings. This valuable material has not yet been fully worked out. The collected monographs will, however, provide the future historian of Hungarian education with a rich store of facts.

Before the days of Maria Theresa the churches founded, controlled, and carried on the schools. The chief aim of these Schools was to preserve the religious faith and to train religious teachers. The teachers were clerics, the instruction was in the Latin tongue, and there was no sharp distinction between Secondary Schools and Universities. Church control of Secondary Schools.

After the Reformation, Lutheran Schools came into existence, and a wholesome rivalry was created between the Schools of the Jesuits and those of the Reformed Church, which had a salutary effect on education. This influence, combined with Western educational ideas, introduced by Hungarians who had studied abroad, tended to make the education humanistic and classical rather than wholly religious. The national character of education was not developed to any extent at this period. It is, however, remarkable that owing to the strifes of civil wars and foreign influences the national character was not wholly lost. Influence of Reformatio and Foreign ideas.

The *Ratio Educationis* (1777) and the educational endowment known as the Hungarian Educational Fund* are two remarkable creations in connection with the educational activity at the time of Maria Theresa. A whole series of new educational institutions sprang into existence under this Queen's inspiring influence, including law and military schools, and State Inspectors were appointed. Laws concerning schools had existed as early as the sixteenth century, but these had to do only with the endowment and equipment of schools for the nobility. Ratio Educationis 1777, and Hungarian Educational Fund.

In 1777 the first part of the *Ratio Educationis* appeared under the title: *Ratio Educationis Totiusque Rei Literariæ per Regnum Hungariæ et Provincias eidem adnexas. Tomus I. Vindobonæ, MDCCLXXVII.* The second and completed edition of the *Ratio* appeared in 1806; this contained the outlines of the educational system which existed until 1848. The Protestant bodies received freedom in church and school matters in 1790. They did not recognise the *Ratio*. The Greek Oriental Church received the same freedom in school matters by the law of 1868. Independence of Reformed Churches.

The First *Ratio Educationis* (1777-1806) decreed that the Secondary School should consist of three grades, and the course should last seven years. Grades under first Ratio.

- | | |
|--|--------------|
| I. Lower Latin School (Grammatical)... | Three years. |
| II. Middle School | Two years. |
| III. Philosophical School..... | Two years. |

* "Dieser Studienfond wurde, 1773, aus den eingezogenen Gütern der aufgehobenen Jesuitenkollegien gebildet und durch sonstige Königl. Donation und Privatstiftungen vermehrt. Der Studienfond beträgt gegenwärtig bei zwanzig Millionen Gulden."—Dr. M. Kármán.

Latin was the predominating subject.

In the reign of Joseph II. a re-action set in, and an agitation arose for the Hungarian language to be the medium of instruction. The Reformed Churches used Hungarian instead of Latin in their schools at an early date, but it was not until 1844 that the Government acceded to the wish of the nation in this matter and ordered the mother-tongue to be the universal means of instruction.

Second Ratio
Educationis,
1806.

The Second *Ratio Educationis* (1806-1848) was only a further edition of the first. This also considered the Secondary Schools to be three-graded, and the course was extended to eight years—

- I. Little Classical School - - - Four years.
- II. Greater Classical School or Humanistic
School - - - Two years.
- III. Philosophical School - - - Two years.

In this document we find German and Hungarian are to be taught to those pupils who wish for it.

Austrian
influence.

In 1848 the Education Minister Baron Joseph Eötvös wished to reform the Educational system, especially the curriculum of Secondary Schools. The political disturbances of the time checked his endeavours, and when peace was proclaimed the Austrian Government introduced foreign methods. In 1849 appeared the "Outlines of the organization of the *Gymnasien und Realschulen* of Austria."* This law existed until 1860, and all public schools had to submit to it.

According to these Outlines the Secondary Schools were two-graded:—

- I. Lower School.
- II. Upper School.

Classical languages were the centre of instruction and Greek was compulsory. The mother-tongue was the medium of instruction; this, however, meant German. In districts purely Hungarian, the German language was an obligatory subject. The leaving examination of the pupils and the examinations of the teachers were conducted in the German language.

Realschule

A remarkable novelty in this law was the *Realschule* consisting of six classes. The aim of this school was to prepare boys for commercial and industrial pursuits and to give the pupils a broad general knowledge without Latin and Greek. In some instances the Realschulen consisted of four, three, and even two classes and combined with the Primary and Citizen Schools. Attempts at combining Classical and Modern Schools were made, and an Under-Modern-Classical School was tried in which some of the modern subjects made way for the elements of Latin and Greek. The Hungarian Government wanted various alterations in this Scheme of education thrust upon them, but only slight modifications were admitted. Baron Jos. Eötvös, who succeeded in reforming Primary Schools, wished to have one great

* "Entwurf der Organisation der Gymnasien und Realschulen in Oesterreich."

Secondary School of three grades, Little School, Great School, and Lyceum, and nine classes, in which the modern and classical elements combined. He died before he had completely worked out his scheme, and his reforms were never completed.

Attempt to
unify Modern
and Classical
Schools by
Baron J.
Eötvös.

The following is his scheme:—

SCHEME for Combined Classical and Modern Secondary School.
Baron Eötvös, 1868.

	Secondary School.				Lyceum.				
	Little School.				Great School.				
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.
Religion - - - - -	2	2	2	2	2	2	Compulsory Subjects for 1st year : Universal and Church History, Hun- garian, and Roman History, History of Art, Philosophy, Political Arithmetic. In the two final years, the pupil should only attend classes in such sub- jects as will prepare him for his after career.		
Hungarian - - - - -	3	3	3	3	4	4			
Latin - - - - -	6	6	5	5	6	6			
German - - - - -	-	-	2	3	3	3			
Geography - - - - -	2	2	2	-	2	2			
History - - - - -	-	-	2	2	3	3			
Mathematics - - - - -	5	5	3	3	4	4			
Physics - - - - -	-	-	3	4	-	-			
Chemistry - - - - -	-	-	-	4	-	-			
Natural History - - - - -	2	2	-	-	2	2			
Drawing - - - - -	4	4	4	4	-	-			
Geometry and Freehand - - - - -	-	-	-	-	-	-			
Gymnastics - - - - -	2	2	2	2	2	2			
Writing - - - - -	1	1	-	-	-	-			
	27	27	28	32	28	28			
Optional Subjects - - - - -	Singing. French. Drawing. English. Italian. Short-hand.								

This reform was too bold for the other statesmen, and the Reformed Church feared the expenses, so the scheme fell through.

The following minister, Pauler, accepted the Austrian "Outlines" with certain modifications, but this was not satisfactory. Reform was wanted on new pedagogical lines. The instruction must correspond with the age and capacity of the children, and the methods of teaching must be based on psychology. So the new scheme of 1879 appeared, which was completed by the famous law of 1883.

Reform on
Pedagogical
lines.

These changes only refer to the State Schools. The various schools controlled by religious bodies other than State, had their own schemes for instruction. The State laws, however, influenced them indirectly by raising the whole public feeling on matters educational.

The language of instruction during this time was chiefly Latin, the school books were written in Latin, and the mother

Language of
Instruction.

tongue was only used in lower classes until the boys could read Latin. All conversation in school was carried on in Latin. Certainly Joseph II. wanted to make German the language of the schools, but he only succeeded in districts where the German element predominated. The professors were in many instances unacquainted with German, therefore Latin again recovered its sway after the temporary check. Later, there was much uncertainty and sometimes one and sometimes the other language was used. The Protestants used Hungarian in their schools as early as the end of the eighteenth, and the Roman Catholics held to Latin up to the middle of the nineteenth century, when the Government discontinued its use in schools.

Want of uniformity owing to religious differences.

The Secondary Schools were full of contradictions owing to religious differences. In 1867 out of 146 Classical Secondary Schools only twelve were entirely controlled by the State.

The Catholic State Schools were completely under the control of the State. The non-Catholic Schools resisted all attempts made to subordinate them to the State, and large numbers of small schools sprang up, because a number of small schools could more easily avoid the Catholic influence of Government than one large one.

It is easy to see that a Government seeking to control twelve or thirteen varieties of Schools, each possessed of full freedom, had a difficult task in attempting to introduce a law which would unite them all. There were various attempts and hard struggles before the law of 1883 was ready to be signed by the King.

Secondary Education Act of 1883.

This important Act in the history of Hungarian Education is the Secondary School Act of 1883. The significance of this law is twofold. First, it gives to the Hungarian language its proper place as the national speech by securing that it shall receive attention in all school plans of instruction, and secondly, it secures to the State control over all Secondary Schools, denominational and otherwise. This law has now been in existence for more than fifteen years. It has been used tactfully, and the differences have now almost totally disappeared. The following is a summary of some of the chief points in this Act.*

Curriculum of Secondary Schools.

Secondary Schools are divided into Classical and Modern Schools (*Gymnasien* and *Realschulen*). The aim of these schools is to provide boys with a higher general training, and prepare them for the Universities. The *Gymnasien* attempt to carry out this aim by means of a humanistic training, especially classical, the *Realschulen* by means of Modern Languages, Mathematics, and Natural Sciences. Secondary Schools are to consist of eight classes, in each of which the pupil passes one year. There may, however, be incomplete schools consisting of a smaller number of classes.

The compulsory subjects of the Grammar School are Religion, Hungarian Language and Literature, Latin Language and Literature, German Language and Literature, Greek Language and Literature,† Geography, Hungarian and General History, Psy-

* Statute xxx., v. J. 1883, on Secondary Schools.

† Greek has been omitted from the list of compulsory subjects since 1889

chology and Logic, Mathematics, Natural History, Physics and Chemistry, Geometry, Penmanship, Gymnastics and Military Drill.

The compulsory subjects of the Modern School are Religion, Hungarian Language and Literature, German Language and Literature, French, Psychology and Logic, Geography, Hungarian and General History, Mathematics, Natural History and Geology, Physics, Chemistry, Geometry, Freehand Drawing, Penmanship, and Gymnastics and Military Drill. (Modifications have taken place in the curriculum since 1883.)

In all Secondary Schools (State and Church) the Hungarian Language must be taught. It is to be the medium of instruction in all districts where Hungarian is the mother-tongue. In districts where Hungarian is not the mother-tongue Hungarian must be taught as a modern language, and the instruction in the 7th and 8th classes (*i.e.* the two highest classes), as well as the leaving examination (*érettségi vizsga*), must be conducted in this language.

The text books used in all schools (State and Church) must be approved of by the Minister of Education. General Regulation

Pupils received into Class I. of a Secondary School must be nine years of age and must either produce evidence of having passed through the four lower classes of an Elementary School, or pass an Entrance Examination.

The number of scholars in a single class must not exceed 60.

The school year consists of 10 months. The holidays are in July and August. A public examination takes place at the end of each school year. At the end of his 8th school year the pupil must take the leaving examination. This is partly a written and partly an oral examination. The oral part is public

The leaving examination of a Classical School qualifies pupils to be received into the University. The leaving examination of a Modern School qualifies pupils to enter a Polytechnikum or the Mathematical or Science side of the University. Pupils from the Modern School who have taken Latin may enter the Medical or Law Schools of a University, and pupils who have taken Greek as well as Latin may enter any faculty of the University. Leaving Examination

In a school of eight classes there must be at least ten teachers. In a school of four classes there must be at least five teachers. The director can only be called upon to teach 10 hours weekly, and the professors of special subjects 18 hours weekly. The drawing master may be required to teach 20 hours weekly. Organisati

All Secondary School professors are entitled to a pension. The Minister of Education has the power to forbid the use of any book in the schools which is contrary to the teachings of law, or opposed to the State. The Minister has the power to take away State aid, moral and material alike, from a school that is unsatisfactory, providing the school authorities have been warned at least three times, with an interval of half a year between each warning.

The following plan of studies, approved of by the Minister in 1886, and still adhered to, will give an idea of the curriculum of a Modern School * :—

Subjects.	Number of Class.								Total of Weekly Lessons.
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	
1 Religion - - -	2	2	2	2	2	2	2	2	16
2 Hungarian Language and Literature -	5	5	3	3	3	3	3	3	28
3 German - - -	5	4	3	3	3	2	2	2	24
4 French - - -	-	-	5	5	4	4	3	3	24
5 Philosophy - - -	-	-	-	-	-	-	-	3	3
6 Geography - - -	3	3	-	3	-	-	-	-	9
7 History - - -	-	-	3	-	3	3	3	3	15
8 Mathematics - - -	3	4	3	4	5	4	4	3	30
9 Natural History -	2	2	-	-	2	3	3	-	12
10 Physics - - -	-	-	3	-	-	-	4	5	12
11 Chemistry - - -	-	-	-	2	2	3	-	-	7
12 Drawing and Geometry - -	5	5	2	2	2	2	2	2	23
13 Freehand Drawing - -	-	-	2	2	2	2	2	2	12
14 Penmanship - - -	1	1	-	-	-	-	-	-	2
15 Gymnastics - - -	2	2	2	2	2	2	2	2	16
Total number of hours weekly -	28	28	28	28	30	30	30	30	232
Number of Subjects taught in each class -	9	9	10	10	11	11	11	11	-

[The classes are numbered from the bottom of the school. The pupil passes one year in each class.]

* Curriculum of the Hungarian Modern Schools, 1886. (A Magyar reáliskolák tanrendje, 1886.)

The following is the curriculum of the Classical Schools for 1898-9:—

	Subjects.	Number of Class.								Total of Weekly Lessons.
		I.	II.	III.	IV.	V.	VI.	VII.	VIII.	
1	Religion - - -	2	2	2	2	2	2	2	2	16
2	Hungarian - - -	6	5	3	4	3	3	3	3	30
3	Latin - - - - -	7	7	6	6	6	6	6	5	49
4	Greek - - - - -	-	-	-	-	5	5	5	4	19
5	German - - - - -	-	-	4	3	3	3	3	2	18
6	History - - - - -	-	-	4	3	3	3	2	3	18
7	Geography - - -	4	4	2	-	-	-	-	-	10
8	Natural History -	-	-	-	3	2	3	-	-	8
9	Physics - - - - -	-	-	-	-	-	-	4	4	8
10	Mathematics - - -	3	4	3	3	4	3	3	2	25
11	Drawing and Geometry - - -	3	3	2	2	-	-	-	-	10
12	Philosophy - - -	-	-	-	-	-	-	-	3	3
13	Pennmanship - - -	1	1	-	-	-	-	-	-	2
14	Gymnastics - - -	2	2	2	2	2	2	2	2	16
Total number of hours weekly—		28	28	28	28	30	30	30	30	232
Number of subjects taught in each class -		8	8	9	9	9	9	9	10	-

[The classes are numbered from the bottom of the school. The pupil passes one year in each class.]

A comparison of these curricula will show that an endeavour is made to give a broad general training in both cases, to appeal to the pupils' many-sidedness, and to harmonise as far as possible the two schools with regard to number of subjects and number of hours.

The agitation against Greek being an obligatory subject was, as we have seen, an effort to draw the two schools closer together.

The following details are taken from the Act of 1890† in which the changes are made.

Act of 1890
on the
Teaching of
Greek.

Greek is no longer an obligatory subject in the Classical Schools as in the Act of 1883. Instead of the Greek language and literature a wider knowledge of Hungarian literature is demanded, as well as the study of Greek classical literature in translation, and geometrical and freehand drawing. State schools must accept these changes.

The denominational schools have the option of accepting them or not. Greek is still required for pupils who wish to take theological, philosophical, or philological studies in the university,

† Statute xxx., v. J. 1890.

therefore it is taught as an optional subject, and as these changes involve more teaching power, the staff may be increased. This compromise demands a further study of Hungarian literature, and while ensuring a certain amount of Greek culture in the works of Greek authors, it enabled the pupils to spend two hours weekly in model and geometrical drawing.

A glance at the authors prescribed may be interesting.

- | | |
|-------------|--|
| Class V. | Class V. :
(a) Hungarian. Readings from prose writers of 16th and 17th centuries. Selections of lyric poems from the classical period.
(b) Readings from Thucydides with explanations. |
| Class VI. | Class VI. :
(a) Readings from old preachers, orators, and historians.
(b) Readings and explanations from the <i>Iliad</i> and <i>Odyssey</i> . Greek religion and Greek art. |
| Class VII. | Class VII. :
(a) Readings from the older Hungarian poets.
(b) Readings from the dramas of Æschylus, Sophocles, and Euripides. History of Greek poetry. |
| Class VIII. | Class VIII. :
(a) Readings from prose works of modern Hungarian literature.
(b) Selections from the works of Plato and Aristotle. |

In consequence of this Act, Greek has been given up in many schools. To merge the classical and modern schools into one harmonious whole, and so guard against the dangers of early specialisation, has formed a fruitful theme of discussion among the various educational authorities of Hungary. The present Minister is of opinion that, however desirable this may be, it is a question for the future to decide, and as other countries have not yet arrived at a satisfactory solution of this problem, Hungary can afford to wait.

Recent
alteration in
the Curricu-
lum 1899.

The following alterations have been introduced into the Secondary Schools according to the Ministerial Ordinance dated May 6th, 1899.

1. The translations from Hungarian into Latin are considerably reduced.
2. The History teaching shall lay greater stress upon "the organic connection between Hungarian and World History."
3. The History of Hungarian literature shall be studied much more extensively, including wide readings from the works of Hungarian authors of all ages.

4. Greater facilities are afforded for the learning of drawing. This includes artistic as well as formal drawing.

5. More attention is to be paid to the teaching of Chemistry. This regulation holds good in the Classical as well as in the Modern Schools.

6. More hours are to be devoted to the teaching of modern languages. This regulation only refers to German in the Classical Schools. In the Modern Schools it includes French and German.

These alterations only take effect in the lower classes at first, and gradually work their way up through the school.

The Government regulations with regard to Organisation* and Discipline of the Secondary Schools are very definitely laid down. Parents are required to communicate the reason of a pupil's absence from any class, and teachers are also required to notify absences to the Director. The regulations concerning absences through infectious diseases are very stringent. Parents are expected to co-operate with the teachers in the moral training of the pupils. The professors are required to neglect no opportunities of cultivating moral, religious, and patriotic principles in their pupils. School furniture and books are to be respected, and all notebooks are to be kept neat and tidy in order that careful habits may be formed.

Act of 1890—
Organisation
and Discip-
line.

Corporal punishment does not exist. The following are the means of discipline sanctioned by the State:—

1. The professor expostulates privately with the pupil.
2. A severe reprimand is administered.
3. A public reprimand is given before the class.
4. The unruly pupil is summoned before the Director, who may consult with the parents.
5. The pupil is summoned before the Council and threatened with expulsion.
6. The pupil is expelled from the school, or, in severer cases not admitted into any other school in the town.
7. In cases of gross immorality the pupil is excluded from all schools in the kingdom of Hungary.

All cases of insubordination are entered in a day-book. When a pupil is expelled by the Council, the circumstances of the case must be brought before and signed by the Minister.

The pupils receive reports twice a year regarding their diligence and progress. These are to be signed by the parents.

No other days except Sundays and holidays may be free from lessons.

* Középiskolai szervezet, 1890.

Christmas holidays extend from December 24 to January 2; Easter holidays from Palm Sunday until Easter Tuesday; summer holidays, all in July and August. The King's name and birth days and certain other days are set apart as school holidays. In addition, the Director has the power to give three holidays, not following each other, in each year.

The Director in arranging the staff must, as far as possible, give related subjects—especially in lower classes—to one teacher. The professors of the lower classes must have opportunities for teaching their special subjects in higher classes.

Only text-books approved of by the State may be used in the schools. The Director must be watchful that the substance of the lessons is founded on these books.

A school library must be formed in each school; the books are to be used in connection with the lessons.

school
societies.

The pupils of the two upper classes are permitted to form and carry on a Literary Society* to further their general culture. This is under the direction of a professor and controlled by the Director.

Singing and musical societies may also be founded.

Professors are expected to prepare their lessons carefully and to follow the settled plan of instruction. Professors are also expected to keep the full attention of the class.

Between each lesson is a break of ten minutes, in which the windows are opened and the pupils walk in the corridors or playground.

The subject of each lesson is entered by each professor in a diary kept for this purpose.

It is the duty of the Director to watch over the moral and intellectual progress of the pupils, therefore he has to encourage the professors to keep to the spirit as well as the letter of the instructions. He must be present at one or two lessons of each professor every month. His criticisms must never be made in the presence of the pupils.

At the beginning of each school year the staff holds a conference for the purpose of dividing the work.

Each Secondary School draws up a Special Study plan, based upon the typical one laid down in the instructions, and observing the special needs of the neighbourhood. Other conferences are held at stated intervals to discuss methods, home lessons, etc. Unity in the plan of studies is to be especially aimed at, therefore the professors must confer frequently, and keep careful records in school diaries of the work of their classes.

reports and
examina-
tions.

In December and March reports are written on each pupil, and sent to the parents for their signatures. The Headmaster keeps these reports until the pupil leaves the school. Public examinations are held yearly, and the pupils are promoted to a higher class if they are sufficiently advanced. After completing the 8th class pupils have to pass the leaving examination.

* Önképző egyesület.

Pupils educated privately are allowed to pass the examinations of public Secondary Schools.

Teachers of Religion are required to send in reports of the work of their pupils.

There is a public ceremony at the end of the school year as well as at the beginning.

School reports are published each year. The Government gives definite directions of the items they are to contain.

In 1885 a law was passed requiring that qualified men, especially trained in the Universities in School Hygiene, Physiology and kindred subjects, should be appointed to watch over the health of the pupils, to give advice on matters of Hygiene, and to teach the boys of the upper classes two hours weekly such matters referring to Hygiene and Physiology as an ordinary citizen should be acquainted with. Regulations concerning Hygiene.

The Secondary School Education Act of 1883 gives definite instructions concerning the training of Secondary School professors. Training of Secondary Teachers.

Candidates become qualified professors by observing certain conditions and passing certain examinations.

(a) The candidate must show his leaving certificate to prove that he has passed through a classical or modern school. In the latter case he must be able to read and understand easy Latin books, *e.g.*, Cæsar, Ovid, or Cicero.

(b) He must produce evidence that, on completing his school course, he has studied for four years in a University or Polytechnikum the special subjects he wishes to become qualified to teach. He must choose at least two special subjects, he is strongly recommended to take three. He must also prove his proficiency in Hungarian language, literature, history, and general Hungarian culture. He must show a thorough acquaintance with Pedagogy, History, principles and methods of Education, with a knowledge of the special methods of teaching his special subjects. He must also have studied Logic, Psychology, and the History of Philosophy.

Candidates who propose to teach modern languages must have studied Greek and Latin.

Of these four university years, three may be spent in a foreign University.

(c) The candidate must prove that after completing his university course he has had practical teaching experience in a secondary school for at least a year.

The candidates are examined by a Special Examination-Commission* called together by the Minister for this purpose. This body consists of members chosen from Secondary School Masters, to which are added specialists in special subjects of instruction. These are chosen for their learning. Examination Commission

According to the Statute for Hungarian Secondary School Teachers, 1888, the candidate must choose at least two special subjects which he wishes to teach from the following groups:—(1) Classical Philology (Latin and Greek); (2) Hungarian Language Special Subjects for Secondary Teachers.

* Vizsgáló bizottság.

and Literature, and one of the three following: Latin, German, French*; (3) German, with Latin or French; (4) History, with Latin or Geography; (5) Natural History, with Geography or Chemistry; (6) Mathematics, with Physics or Geometrical Drawing. The Statute recommends that the candidate should also make a special study of a third subject or else of Philosophy.

The examination is threefold:

- (a) General Examination.
- (b) Examination of Special Subjects.
- (c) Pedagogical Examination.

general
examination.

General Examination.—After at least two years' study in the University the candidate may present himself for the general examination. This is composed of two parts, a written and an oral examination. The latter is public. The candidate must write a theme in the Hungarian language on some subject of interest in Hungarian literature. The candidate will be subjected to an oral examination in the elementary parts of his special subjects, and will be expected to show sufficient knowledge of these subjects to prove that a continuation of his studies will be profitable. He will be examined orally in the Hungarian language and literature, and in one modern language (German, French, English, or Italian), with the literature of the same.

The candidate must be provided at this examination with his certificate of birth, a medical certificate, his school leaving certificate, and a certificate to prove that he has studied in a University.

special
examination.

Examination of Special Subjects.—After two further years' study the candidate may present himself for examination in his special subjects. Five months before he presents himself he is given a theme in each of his subjects upon which he has to write a dissertation. If Latin or Modern Languages are chosen, he must write his dissertation in these languages. Laboratory work may be offered in place of this dissertation if the candidate be a student of Natural Science.

An oral examination follows this piece of work, in which the candidate is expected to show proficiency in his subject. The candidate must bring to this examination his certificate to show he has passed the general examination, and a certificate to show that he has studied two years further in a University.

professional
examination.

Pedagogical Examination.—A year after the special examination the candidate may present himself for his examination in pedagogy. This consists of a philosophical or pedagogical dissertation, and an oral examination in History of Philosophy, Logic, Psychology, Pedagogy, History of Pedagogy, and special

* In schools where Servian, Roumanian, or Italian is the mother-tongue 'is language with Hungarian may form a separate group

methods of his own subjects. The examiners constantly have in mind the candidate's qualifications with regard to teaching all classes of the Secondary Schools.

The candidate must bring to this examination his former certificates and a certificate to prove that he has had practical experience for at least a year in a Secondary School. Private coaching may count if the candidate has prepared his pupil alone, and the boy has successfully passed the examination for which he was prepared.

The present Minister, Dr. Wlassics, has established in Budapest a State Training College for Secondary Teachers. This establishment came into existence in 1895. The college is directly under the control of the Minister. Its aim is to train University Students for the profession of teaching. The students all live together in the Training College, and continue their University studies simultaneously with their pedagogical training. At the head of the college is a Curator, and under him are four professors, who are appointed by the Minister. It is the duty of these professors to teach the students the principles underlying education, and show them how they can be applied. The Students teach in a Gymnasium annexed to the Training College for that purpose. The methods adopted are Herbartian, as worked out by Ziller and Stoy. The professors must also direct the literary training of the students, and give them opportunities for practice in speaking and writing modern languages. Drawing, Music, Gymnastics, Hygiene, and Physical Education also receive due attention. At the end of each school year the Curator and professors formally confer together in regard to the students' work, and weed out the unsatisfactory ones. Students may not remain in the college longer than four years.

One of the most interesting educational institutions in Budapest is a "Seminar" and Practice School for Secondary Masters, which owes its origin to Dr. Kármán. This institution, which came into existence in 1872, is, I believe, unique in Europe. It will be remembered that Ziller's Seminar, at Leipsic, in connection with his Chair of Pedagogy at the University, attracted many students of education. Ziller's "Seminar" was modelled after Herbart's famous school at Königsberg. Among Ziller's students, more than a quarter of a century ago, three young men were comrades, who have since exerted a profound influence on education. These three are at the present time Prof. Rein of Jena, Dr. Kármán of Budapest, and Dr. Vérédy, Chief Inspector of Budapest. The "Seminar" founded by Dr. Kármán is modelled on Ziller's "Seminar" at Leipsic. It is an attempt to do for Secondary Teachers what Dr. Rein is doing for Primary Teachers in Jena. In visiting Hungarian schools one meets with the influence of Herbart and his followers everywhere; in the schemes of instruction, the unity of plan, in the methods of teaching, in the use made of the pupils' environment, in the expeditions, the school journeys, the reading

State Training College for Secondary Teachers.

Seminar and Practice School for Secondary Teachers.

Herbartian Influence on Hungarian Education

**Aims of the
Pedagogical
Seminary.**

books, the language teaching, and the Training Colleges. It is very evident that great principles and sound methods have been at the root of the Hungarian educational system for years, and when one knows that men like Dr. Kármán and Dr. Verédy have been working at educational problems, the progress is not surprising. The Pedagogical Seminary founded by Dr. Kármán has three distinct aims. First, it is a Classical Secondary School. Secondly, it is a Practice School for Secondary Teachers. Thirdly, it is an institution for promoting special methods of teaching in Hungarian Secondary Schools.

**Necessity of
a Practice
School.**

Practical as we English are, we do not seem to apply our practical common-sense in our conception of Training Colleges. The Practice School is as essential a part of a Training College as the Hospital is of a Medical School, yet we are perfectly content to connect a Training Department with our Universities without making any attempt to establish a school wherein to demonstrate our methods. We have no settled belief in Practice Schools, nor have we any clear conception of the part which such a school ought to play in the adequate training of Teachers. Our half-hearted belief in educational methods is probably at the root of our scepticism. When all teachers are unanimous in believing that teaching principles exist, we shall recognise that a student's practical work during the Training Course demands more than the preparation of an isolated lesson, to be given before an Inspector, and a few desultory hours spent in a school. Abroad, it is generally recognised that theoretical teaching apart from systematised practice is pernicious.

May I be permitted to quote Herbart on this matter? He writes in 1809, on establishing his Seminar at Königsberg, "Education cannot be merely taught: it must be demonstrated and practised. I long ago conceived the idea of teaching a small number of selected boys myself, for an hour daily, in the presence of young men acquainted with my pedagogy, who will attempt in my place and under my eye to carry on what I have begun. Gradually in this way teachers may be trained, and their methods must be perfected by mutual observation and exchange of experience."

The students in the Budapest Pedagogical Seminary are young men who have spent eight years in a Secondary School, four years in a University, and have passed the general and special examination imposed by the Vizsgáló bizottság.

They make a thorough study of the theory of Special Secondary School Teaching, in connection with practical experience of the same. Their philosophical and theoretical pedagogical studies are already completed. The staff consists of leading professors of special subjects, Professor of Pedagogy, and a Director.

**Method of
Training.**

Each candidate announces the special subjects he wishes to teach, and he is placed under the direction of the professor of

that subject. At first he is not permitted to teach himself, but he must attend all the lessons the leading professor gives to the various classes, he must work out series of lessons under the direction of the professor, and after about three months he may begin to teach. The professor is always present at his lessons to offer him advice and criticism. I was present at various lessons.

In Class V. I found a candidate reading Ovid with about forty Class V. boys; two other candidates were present and the leading professor.

In Class I. the leading professor gave a lesson to little boys of Class I. nine or ten, on Millet, in the presence of these candidates. The children showed a good deal of real interest, and gave full descriptions from their own observations.

In Class III. the professor gave a German lesson in the Class III. presence of candidates. The lesson was on Uhland's poem *Einkehr*. In the German lessons the Hungarian speech is abandoned as far as possible. The professor began by connecting the lesson with a previous reading lesson from Grecian mythology. "We have read about the golden apples of Hesperides, now we will read about real apples that we can eat, growing on an apple tree." Then he read the whole poem aloud and asked simple questions about it in very distinct German. He often paused to ask, "Do you understand?" and sometimes explanations had to follow in Hungarian.

In Class VII. a candidate gave a German lesson on Goethe's Class VII. *Iphigenie auf Tauris*. The professor and two candidates were present. The lesson was chiefly a philosophical discussion on the meaning of the poem. The whole lesson was conducted in German, and all the boys spoke the language fluently.

Every week there is a *Praktikum* or criticism lesson. In the Praktikum and Theoretikum. early part of the year these lessons are given by the leading professors, and the whole Seminar are present. In the latter part of the year the candidates give these lessons, and a conference is held two days afterwards in which all points raised by the lessons are fully discussed. Twice a week a *Theoretikum* is held in which general principles and special methods of Secondary School teaching are discussed. I was present at one of these, which was held in German instead of Hungarian for my benefit. The discussion was on the Curriculum of Secondary Schools.

The Time Table, given below, shows the weekly hours and subjects Time Table. in Classes I., III., V., and VII. The lessons last 45 minutes. There is 15 minutes pause between each lesson, and during these intervals all the pupils go into the corridors or playgrounds.

French, religion, drawing, and singing are taught in the afternoon. The priests and religious teachers visit the schools at appointed times for the purpose of giving religious instruction.

The Hungarians are ever seeking educational light from other Educational Visits to other Lands lands, and in order to encourage their teachers to take broad views, the Government has sent out from time to time qualified teachers to report on methods employed in other countries.

TIME TABLE OF CLASSICAL SECONDARY SCHOOL FOR BOYS.

	CLASS I.		CLASS III.		CLASS V.		CLASS VII.		AFTERNOONS.	
	8-9	9-10	10-11	11-12	12-1	8-9	9-10	10-11	11-12	12-1
Monday	Latin. Hungarian. Geography. Religion (Catholic and Jewish). Singing.	Latin. Geometry. Hungarian. Arithmetic. Religion.	Latin. Geometry. Hungarian. Arithmetic. Religion.	Latin. Physics. Arithmetic. German. Gymnastics.	Hungarian. Latin. German. Greek. Gymnastics.	Latin. Greek. History. Gymnastics.	Latin. Greek. Mathematics. History.	Class III. - 4-5 Religion (Evangelical). " V. - 3-4 French. 4-5 Religion (Catholic and Jewish). " VII. - 3-4 Religion (Catholic and Jewish). 4-5 French.		
Tuesday	Latin. Geography. Geometry. Gymnastics.	Latin. Geometry. Hungarian. Arithmetic. Gymnastics.	Latin. Physics. Arithmetic. German. Gymnastics.	Latin. Physics. Arithmetic. German. Gymnastics.	Hungarian. Latin. Greek. Mathematics.	Latin. Hungarian. History. Greek.	Latin. Hungarian. History. Greek.	Class I. - 3-4 Singing. 4-5 Singing. " III. - 3-4 Singing. 4-5 Singing. " V. - 3-4 Religion (Evangelical). 4-5 Singing. " VII. - 3-4 Freehand drawing. 4-5 Freehand drawing.		
Wednesday	Latin. Arithmetic. Hungarian. Natural History.	Latin. Arithmetic. Hungarian. Natural History.	Latin. German. Arithmetic. Physics.	Latin. German. Arithmetic. Physics.	History. Hungarian. Latin. Mathematics. Natural History.	Latin. Greek. Physics. Hungarian. Mathematics.	Latin. Greek. Physics. Hungarian. Mathematics.	Class I. - 3-4 Religion (Evangelical). " II. - 3-4 Religion (Evangelical). " V. - 3-4 Religion (Reform Church). " VII. - 3-4 Religion (Evangelical).		
Thursday	Latin. Natural History. Geography. Hungarian. Gymnastics.	Latin. Natural History. Geography. Hungarian. Gymnastics.	Latin. History. Hungarian. German. Gymnastics.	Latin. History. Hungarian. German. Gymnastics.	German. Hungarian. Latin. Natural History. Mathematics.	Physics. German. Latin. Greek. Hungarian.	Physics. German. Latin. Greek. Hungarian.	Class V. - 3-4 Freehand drawing. 4-5 Freehand drawing. " VII. - 3-4 Menography.		
Friday	Latin. Arithmetic. Hungarian. Geography. Religion (Catholic and Jewish).	Latin. Arithmetic. Hungarian. Geography. Religion (Catholic and Jewish).	Latin. Hungarian. History.	Latin. Hungarian. History.	Greek. Latin. German. History. Gymnastics.	Physics. Latin. Mathematics. German. Gymnastics.	Physics. Latin. Mathematics. German. Gymnastics.	Class I. - 3-4 Religion (Evangelical). " III. - 3-4 Religion (Evangelical). " V. - 3-4 French. 4-5 Religion (Catholic and Jewish). " VII. - 3-4 Religion (Catholic and Jewish). 4-5 French.		
Saturday	Latin. Hungarian. Arithmetic. Pepmanahip.	Latin. Hungarian. Arithmetic. Pepmanahip.	Latin. Physics. German. Hungarian. Geometry.	Latin. Physics. German. Hungarian. Geometry.	Greek. Mathematics. History. Latin. Stenography.	Greek. Latin. Physics. German. Hygiene.	Greek. Latin. Physics. German. Hygiene.	Class I. - 3-4 Religion (Evangelical). " III. - 3-4 Religion (Evangelical). " V. - 3-4 Religion (Evangelical Reform). " VII. - 3-4 Religion (Evangelical). 4-5 Religion (Evangelical Reform).		

Among an interesting collection of monographs, the result of these journeys, are—"The Present Educational System in England," "Organisation and Practice of the Secondary Schools of Bavaria," "Pedagogical Studies in Switzerland," and reports from France, Russia, the United States, and other countries.

Another means of widening the sympathies of teachers is to send parties of them under proper guidance to distant lands to study art and history on the spot. For instance, a party of 30 secondary school teachers were sent to Greece in 1893 under the guidance of a university professor. The State provided part of the funds. The following were some of the places visited—Budapest, Trieste, Patras, Olympia, Athens, Aegina, Corinth, Argos, Mykenae, Athens, and Constantinople. In 1896 twenty teachers were conducted on a tour to Egypt and the Holy Land.

According to the regulations of the Act of 1883 gymnastics and military exercises became a compulsory part of school instruction. Many of the gymnastic halls of the schools are fitted up with all modern requirements.

Ball games, old national games, running games and others are encouraged in the playground. Skating seems to be a characteristic winter school amusement. The asphalted courtyards and playgrounds are regularly flooded in frosty weather in order that this exercise may be indulged in. A circular from the Minister in 1891 urged teachers to encourage this sport as much as possible. Swimming and bathing are also encouraged among the pupils in accordance with a circular from the Minister on this subject in 1892. At least three school excursions must be undertaken during the time from April to June, in which opportunities must be afforded the pupils for practising running, marching, and overcoming obstacles. These expeditions are also used in connection with geographical, botanical, and geological studies. These expeditions are frequently extended into school journeys. The following extracts are taken from a boy's account of a school journey undertaken in May, 1899. He is 14 years of age and in the 5th class of a *Gymnasium*.* The journey lasted five days. The boys and the masters visited Belgrade, went down the Danube, through the Kazan Pass, to Orsova, passed through the Iron Gates, and visited Hercules Bad. The account was written in Hungarian and published in the School Report. The boy and his sister translated it into English for me, and I give a portion of it as it stands. Describing the Danube below Belgrade he says: "On our right side was Servia, on the left Hungary. The Danube, as if conscious that she is now the frontier of two lands, is twice as large as at Budapest. The way is very beautiful. We see a great fortress with many towers. That is Szendro. Then great rocks. The mountains grow higher and higher, and the Danube becomes more narrow. On the left is Széchenyi's road. Then begins that part of the Danube which was in olden days notorious because of its dangerousness. Now the great rocks are taken away, or the perilous places are marked with

Teachers' Journeys.

Gymnastics and Military Exercises in Secondary Schools.

Games.

Skating.

Swimming.

School Excursions.

A School Journey

A Boy's Account.

* Minta *Gymnasium*, Budapest.

red." "Then we paid our last compliments to Serbia as we passed the little village Milanovar. There we left off all politics, and in its place turned to admiration of Nature. We are in the Kazan Channel. On every side are mountains, immense, green, or bare. No plains, and we look no longer deeper into the land. The Danube is very small between these mighty cliffs as in Budapest. It seems as if enclosed, like a lake. There is nothing but water and mountains around us. . . . At last, coming forward from the rocks, a ship is to be seen. The two ships meet with a hearty cordial greeting, as if two comrades would meet. Hungarian or German, ships of burden or passenger ships—here all is equal. Now our attention is concentrated on Trajan's path, and we could still see the holes into which the imperious Romans placed their stakes. The inscription of Trajan is quite worn, but a modern one with red letters shows the celebrity. At last we come to the end of the Kazan Channel. Behind us we see no water at all, only mighty mountains. It is quite incredulous that we went there through those rock walls." Those who know this part of the Danube will appreciate the boy's observations. The account contains many sly touches of humour good-naturedly directed against the masters, and there are various political reflections called forth by the historic associations.

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ista.*
*ool-
Letter.* The Hungarian children are astonishing linguists, and as politeness leads them to converse with a stranger in his language, they are delightful companions. The sister of the boy who wrote the report is sixteen; she attends the Girls' Grammar School, and Hungarian is her mother-tongue; in addition to a knowledge of Latin, she speaks French, German, and English fluently. Her letter concerning the translation is so quaint and charming that I cannot resist giving a portion of it: "Please pardon me. It is really not my fault that I did not till now send this translation. I fear you have a very bad opinion and believe I am so very careless and promise something knowing that I cannot hold it. My little brother Imre was very exact and pedantic and was never satisfied with my translation. I am sure I could not make it well enough, I know not enough English to bring in his humour and his easy good style. I hope you will only look for my good will. I wished to make you a very little service, and I can only send you a bad translation of my brother's pretty little work."

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news to
gers.* The friendliness of the Hungarians towards England makes it one of the most delightful countries in Europe to visit, and the school children show their admiration for our nation in a charmingly simple and frank manner. English is not a compulsory subject in the schools, but the number of young people one meets who speak our language is almost incredible. I visited the Girls' Gymnasium during the examinations, and made friends with a delightful Hungarian girl, who eagerly offered to translate Hungarian prospectuses for me. Although she was in the midst of her examinations—she was in the seventh class—she found time to send me pages of English translations. Here is a portion of her letter: "I hope you will pardon my English,

which I must confess I am really ashamed of. My writing is untidy, but please consider that our examinations of Latin, Universal History, Antique Literature, Hungarian Literature, and History of Art all take place this week. Hoping to see you at our examination, and begging for further honouring and agreeable errands,—Yours most obedient and sincerely."

These English letters, translations, and conversations with boys and girls who constantly apologised for their mistakes on the ground that they had to "pick up" English, while they learnt French and German at school, and were therefore not ashamed of their mistakes in my language, made me wish that we knew how to pick up an odd language in the same way, while we were learning Latin and two modern languages at school. The good manners, friendliness, and intelligence of these Hungarian boys and girls convinced me that the study of literature, history, and language did much to develop their intelligence. I spent one delightful day with the girl who wrote the above letter and her two brothers, schoolboys of 12 and 16. They were all keen politicians and intense patriots. They all spoke English fluently. The younger boy was reading Darwin's "Origin of Species," in the original, as a holiday recreation. He had the keenest appreciation of "Alice in Wonderland," which was his favourite English book. "Manchester is near Cheshire," he said to me with a sly twinkle. "Do you ever meet that Cheshire cat?" He told me that school was "excitingly interesting," because the Hungarian history was so beautiful and inspiring. "No nation on earth has a history as grand as ours," he said, "not even the Greeks." He explained to me in careful detail the exact relations between Hungary and Austria. He admired Mr. Gladstone as intensely as he admired Leonidas, but he was sad because his English hero had never, so he said, quite understood Hungary. The elder boy sometimes softened his young brother's statements, but on the whole he agreed with him. Hungarian schoolboys spend their leisure in discussing politics. In the pauses for recreation during the lessons one sees them in small knots deep in controversy. The elder boy gave me an account of the School Literary Society. The Austrian Government made a strenuous attempt after the national catastrophe of 1849 to Germanise Hungary. The nation resisted the endeavour, and clubs and societies were formed all over the country to cultivate the Hungarian language. German was the language of the schools, and the boys banded themselves into a society which they called the *Onképző egyesület*. I will give the boy's own words, for he wrote me a long English letter afterwards explaining the society at length: "Its sole aim was the cultivation of Hungarian literature. Essays were written on the life and works of our poets, their poems were declaimed, and orations were held on their birthdays and anniversary of the days of their death. All this was done to keep our language and literature before the eyes of our youths, and so foster their highest patriotism."

National
Literary
Society.

"It forms to-day a club or league of the sixth, seventh, and eighth classes of our schools. Each member pays a small yearly fee to cover printing expenses. The club is under the supervision of the professor, who teaches Hungarian in the highest class. This is by the Minister's order."

After giving details of the present organisation of the society the boy continues: "I want to convince you that Hungarian schoolboys are not merely numbers and figures, but living boys who think and work for themselves and their country." After complaining that England has a poor opinion of Hungarian intelligence, the boy winds up with the assertion that "Hungary has progressed more intellectually during the last twenty-five years than any other country in Europe," and I do not think that many who know his country would contradict him.

School
Reports.

Among the items of a grammar-school report for the year 1898-99 is an account of a school festival to celebrate the laws of 1848. A pupil of seventeen, a boy in Class VIII., was chosen to make a historical and patriotic speech. Hungarians are born orators, and this boy is no exception. He begins: "We celebrate to-day the Hungarian conquest of new ideas from Western Europe, the ideas which made new Hungary, a Hungary which is modern and free. These ideas came from England, where they were first realised, and from France they were widely spread over Europe." The orator sketches the struggle through several pages, and he winds up with an impassioned plea for freedom of speech, pen, and action. There are various other accounts of festivals and concerts. Among the accounts of school excursions and school journeys is the account of a journey to Kis Körös, where the poet Petöfi was born, and one to the hills of Buda to examine electric engines.

In connection with the Literary Society are reports of the subjects discussed, among which are—"Has Hungarian epic poetry any connexion with the national strivings for freedom?" "What caused the decadence of the power of the kings under the late Árpáds?"

The aim of Hungarian education to make good Hungarian citizens shows itself in every stage of school life. The mite of four who plays at making shoes and baking bread for the soldiers who fight against the Turk, the boy of twelve who tells you that the history of his country is the finest in the world, and the school orator of seventeen who explains how Hungary became modern and free, and discusses the influence of the epic poetry of his country on the national strivings for liberty, are all influenced by that patriotism which has made Hungary, and which is such an inspiring force in school instruction.

Woman's
Culture
Society.

The Woman's Culture Society,* which was established in 1868, by the enthusiasm of a few Hungarian women, has done much to raise the standard of the education of girls in Hungary. The

* Nők művelődési egyesület.

school carried on by this society is a handsome building in Grüne Baumgasse, Budapest. It contains well-furnished class-rooms, laboratories, music-rooms, studio, dining-halls, dormitories, sanatorium, playgrounds, gardens, etc. The pupils are day scholars and boarders.

The classes are graded into—				Years.
4 Elementary Classes	-	-	-	4—10
4 Citizen Classes	-	-	-	10—14
4 Normal School Classes	-	-	-	14—18
8 Gymnasium Classes	-	-	-	10—18
2 Finishing Classes (chiefly languages and literature),* and also				

Classes for Domestic Economy, Cookery, Housekeeping, etc.

The school is under State control. It has a staff of 40 professors and teachers.

The establishment of a Girls' Gymnasium in 1896 was an important step forward in the direction of higher culture for women. In 1895 a conference agreed that it was a great social injustice to deny means of higher culture to women, and a regulation was passed, urged by the Minister of Education and sanctioned by the King, that the Philosophical and Medical faculties of the two universities should be open to women. It was clearly recognised in this conference that Medicine was a suitable career for women, and that higher qualifications were required by women teachers of girls' higher schools, training colleges, and future gymnasiums for girls than came under the Elementary School Act. The result of this conference made the founding of a girls' gymnasium a necessity. Prof. Dr. Zoltan von Beöthy pointed out in a conference of the Woman's Culture Society, firstly, that the aim of the girls' gymnasium was to make woman's education equal to man's, not only because women had a right to the highest culture, but for the sake of that culture itself, which needs what women's minds can bring to it, and, secondly, that women should be qualified for a bread-earning career. He urged that the society could accomplish more than the State, having a freer hand, and being in no way bound to consider existing establishments, therefore it must take the initiative. The consequence of the deliberations of the society was the establishment of the Girls' Gymnasium, which the State fully recognised. In the curriculum it is stated that the school is intended to prepare girls to be the wives of cultured men, and to enable them to take advantage of the Imperial decree admitting them to universities.

The gymnasium selected the best features of the boys' gymnasium and also of the existing girls' schools, and attempted to unite them on scientific principles. The chief guarantee for unity in the curriculum is the logical application of the national points of view. The variations in the girls' curriculum lies mainly in the manner of introducing and working at the subjects of study, and in approaching specialisation with greater caution, hence in

* These classes are for girls who have passed through the Citizen Classes.

the lower forms there was a likeness to the existing schools for girls, and in the upper a rapid approach to the scheme and method of boys' gymnasien.

The Latin instruction begins in the Girls' Gymnasium in the fifth class from the bottom. In the four lower classes German is taught. Greek is an optional subject. Ancient literature (especially Greek classical literature) is read in translation throughout the whole eight classes.

Drawing and singing are taught throughout the school, and needlework is obligatory in the four lower classes.

This Girls' Gymnasium was opened in September, 1896. The Minister of Education granted it the rights of a public school.

The accompanying plan of study hours shows how the time spent in the various subjects is divided in the different classes.

The plan of teaching history is worth considering. Hungarian history is taught in each class, and universal history in connection with it. In Class I. only legends are told, in Class II. a brief outline of Hungarian history. From Class III. to VI. detailed Hungarian and universal history. In Class VII. history of Greek and Roman culture. In Class VIII. Hungarian culture and political life.

The details of the Hungarian and German literature, and Ancient and Modern History are carefully planned, the guiding principle being the "Culture Epoch." The reading lessons, chosen from Hungarian, German, Greek, and Latin authors, are made to contribute to the opening of the soul and the imagination in the sense that Matthew Arnold was constantly insisting on. "To know there is a literature of the world, and to have felt even for a moment something of its seriousness, its beauty, its generous position, its pathos, its humour, is to lay a good foundation," says Prof. Dowden.

The casual visitor to the Hungarian schools cannot fail to be impressed by the excellence of the teaching of literature and the importance attached to its value in the training of character. In all the schools one finds methods based upon great principles.

There exists a living belief in the theories of men like Comenius, Pestalozzi, Froebel, and Herbart.

"Character, not knowledge, is the aim of our education," a professor of pedagogy in Hungary told me, "and so we give our pupils classical literature. This stores the mind with material for forming character and gives them the clue to modern thought."

It is better, perhaps, to err in giving too much literature and history in an educational system than too little, for in the latter case we starve the emotions and the imaginations. "If we wish to make children feel, we must give them something to feel about, and in order to educate the heart we must educate the imagination."

I was introduced to the Girls' Gymnasium on the hills high up beyond Buda, where they were holding a picnic in honour of the anniversary of the King's Coronation Day June 8, 1899. The friendliness, gaiety, and happy chatter of the girls was very

TABLE SHOWING NUMBER OF HOURS SPENT WEEKLY IN EACH SUBJECT IN THE GIRLS' GYMNASIUM AT BUDAPEST.

	Religion.	Hungarian.	History.	Ancient Literature.	Latin.	German.	Geography.	Natural History.	Mathematics.	Philosophy.	Drawing.	Writing.	Singing.	Gymnastics.	Needlework.	Total
Class I.	-	4	1	-	3	3	3	-	4	-	2	1	2	2	2	26
Class II.	-	3	2	2	-	2	2	3	3	-	2	1	2	2	2	24
Class III.	-	3	3	2	-	2	2	4	2	-	2	-	2	2	2	28
Class IV.	-	3	3	2	-	2	2	4	2	-	2	-	2	2	2	28
Class V.	-	3	3	1	7	2	-	3	4	-	2	-	1	2	-	30
Class VI.	-	3	3	2	7	2	-	3	3	-	2	-	1	2	-	30
Class VII.	-	3	3	1	6	2	2	3	3	-	2	-	1	2	-	30
Class VIII.	-	3	5	1	5	2	-	3	2	3	2	-	1	2	-	31
Total	-	25	22	12	25	17	11	23	23	3	16	2	12	16	8	231

Class I. is the bottom of the School. Pupils spend one year in each successive class.

infectious and delightful. They played games, gathered flowers, chattered brightly with the professors and visitors, and were helpful and well-mannered in looking after the little ones. The highest form was the seventh, and the girls, 24 in number, were looking forward to going into the eighth, and then their Gymnasium would be complete. These seventh-form girls gave me a very rosy and enthusiastic account of their work. "We are so happy," one said. "We love our work. Everything is alive and interesting. In the old school days lessons were dreary, but now we have the best professors in Hungary to teach us."

The teachers are men at present, for no Hungarian woman has received the training which qualifies her to teach in a Secondary School. Some of the present pupils are hoping to go to the University and to qualify themselves for teaching in a Girls' Gymnasium.

Control of
Secondary
Schools.

Secondary Schools fall into three groups when considered from the point of view of origin and control :—

- A. Those entirely under Government control.
- B. Those under the *direction* of the Government.
- C. Those under the *supervision* of the Government.

Under group A. are :—

Schools
entirely
under Gov-
ernment
Control.

I. Those schools whose expenses are entirely paid from the State Budget ; in 1897-8 there were in this class 28 Classical Secondary Schools and 23 Modern Secondary Schools.

II. Those Catholic schools founded by the Hungarian educational funds.* Of these there are 17 Classical Schools.

In these schools all expenses are paid by the State, and all matters respecting curriculum, choosing of teachers, discipline, language of instruction, choice of books, etc., are decided by the State.

B. Under the direction of the Government are :—

Schools
partly under
political or
Church
Control.

I. Schools founded by political bodies, as Municipalities or District Committees or Schools founded by private endowments other than Church. (Of these there were 20 in 1897-8.)

II. Roman Catholic and Greek Catholic Schools (47 in number) which have formerly received State or private endowments.

In these cases the financial control is exercised by political or Church bodies. They choose their own teachers and books and make their own time-tables, and the Government recognises them. The educational methods are laid down by the State.

* See above, under Historical Sketch of Secondary Education.

C. Government superintends the schools belonging to independent churches (Evangelical, Reformed Church, Unitarian, and Greek Oriental). The Minister requires reports on matters of finance and methods of Education. These reports are sent in yearly. The expenditure is carefully supervised by the State authorities. The Reports submitted to the Government contain items on the subjects taught, the number of hours spent weekly on each subject, number of classes, results of examination, etc. Religious bodies may draw up their own curriculum, but it must be after the pattern of the one laid down by Government. Books may be chosen by the Church's governing bodies, but they must be submitted to the Government to see that they contain nothing against State or Law. The Minister sends inspectors, and Government inspectors are present during the leaving examinations. This superintendence on the part of the Government has led to no complaints. On the contrary, it has aroused interest in the work and secured unity. There are 59 Secondary Schools in this group.

Schools
belonging to
Independent
Churches.

At the head of the National Educational System stands the Minister of Education. He is a member of the Government and a Roman Catholic. He decides all matters connected with the curriculum, the language of instruction, and the school fees. He lays down the laws with respect to the school buildings, furniture and apparatus; he approves of the books, he chooses the professors and teachers, and exercises authority over them. He decides on methods of discipline and teaching. Under the direct control of the Minister are the State institutions, and those founded by Roman Catholics from Hungarian funds. Under his guidance are the institutions founded by political and religious bodies.

The Minister
of Education.

As we have seen, the latter must adopt the curriculum of the State schools and use the books recommended by the Minister. They control, however, their own finance and discipline, and (subject to the approval of the Minister) appoint their own teachers.

The Minister is advised in matters of educational methods by the Educational Council—*országos oktatástügyi tanács*. This Council was in existence in 1871, and, after passing through several changes, it was re-established in its present form in 1896 by the present Minister, Dr. Julius Wlassics. The Minister is the President of this Council. There are also a Second President, a Vice-President, a Secretary, from 10 to 12 Councillors and not more than 50 Members. These are appointed by the Minister of Education and the Crown. The Secretary and Councillors receive a salary, and the Members receive a fee and travelling expenses.

Educational
Council.

The origin and organisation of the Educational Council is not in accordance with any definite law. It exists solely owing to the influence of the Minister and the Crown.

Historical
Sketch of the
Educational
Council.

This Council came into existence in 1871. Its members were appointed partly by the Minister and partly by the teaching profession, and the members changed with every Ministry. The

original body was divided into four sections, containing advisers on the Universities, Technical Schools, Classical Secondary Schools, Primary Schools.

This division did not sufficiently meet great questions of organisation, and in 1875 the Council was re-organised on more scientific principles. The new Council consisted of seven groups:—

1, Classical Philology; 2, Modern Language and Literature; 3, History, Law, and Economics; 4, Geography and Natural History; 5, Mathematics and Physics; 6, Philosophy and Pedagogy; 7, Singing, Drawing and Modelling.

In each group was one permanent member appointed by the King, and three or four members chosen for three years. In addition there were a number of Ministerial officials who had a place and a voice in the Council; the number of these latter was not to exceed the number of real members. The work of this Educational Council was of profound importance. It had to advise the Minister on all matters concerning Primary and Secondary Schools; to work out the plans of instruction, organisation, and discipline of the schools of various grades; to arrange school examinations, leaving examinations, and to supervise work of the examining bodies concerned with leaving examinations and teachers' examinations; to direct the conferences of the teaching staff in Secondary Schools and Training Colleges, to judge of all school-books and apparatus; and, lastly, to supervise and improve School libraries, museums, and collections of pictures, maps and diagrams. This Council did excellent work for fifteen years, and although the Government did not support their reforming measures to the extent some of the members desired, one of the direct results of the Council's labours was a new and complete organisation of Secondary Schools.

In 1890 a change took place in the constitution of this Council. It became a permanent institution, consisting of a president, two vice-presidents, two secretaries and thirty members chosen from the teaching profession, and representing Secondary, Primary and Technical Schools.

In 1895 this Council was again re-established in its present form by the Minister, Dr. Julius Wlassics.

Hungary was first divided into school districts by Maria Theresa. In 1883 the whole country consisted of 12 school districts.

Chief
Inspectors.

All communication between the Education Department and the Schools is carried on by means of a body of Inspectors. Each district is in charge of a Chief Inspector. He has a secretary and reporter and other helpers. These Inspectors are chosen from the ranks of practical teachers, they are proposed by the minister and sanctioned by the King. Their office is for life. Their salary varies from 2,400 to 3,600 florins, in addition to which from 480 to 800 florins are added for expenses. They all receive pensions. Their duties are to see that all Government

regulations are efficiently carried out in the Schools. They direct the leaving examinations and are responsible for the efficiency of the Schools. They report to the minister at the end of each school year on matters of buildings, furniture, cleanliness, health of pupils, hygienic conditions of schools and boarding houses, discipline and progress. All school requirements go to the Minister through these Inspectors. This post is one of the most important positions in the educational world, and as Dr. Kármán says, "demands a whole man for the work."

The Protestant Churches control their own schools. Committees of church officials are formed for this purpose, in which the teachers have a voice. Inspection in
Protestant
Schools.

In connection with the Reformed Church of Switzerland there is a General Council of thirty-eight members, consisting half of clergy and half of laity. This Council seeks to promote the harmonious development of all its schools, it lays down the aim of teaching, and draws up the details of organisation. It has the power of appointing persons from the teaching profession to inspect the Schools, and also of founding new schools, of closing schools, or adding to or taking away from the number of classes in schools. The general direction of the Secondary Schools is, according to tradition, undertaken by the Church officials of five church districts. This body settles the curriculum and discipline, chooses books, and appoints the Bishops to conduct the leaving examinations. The Bishops in the Protestant districts perform the same offices as the Chief Inspectors in Catholic districts, and send in a yearly report of the condition of the Schools to the District Council. Other independent churches have similar organisations.

The following is a short sketch of the Hungarian Ministers of Education from 1848 to the present time,

Baron Joseph Eötvös, 1848-1871. He was the first Hungarian Minister of Education. His greatest piece of educational work was the Elementary Education Act, 1868. He was interested in the training of Secondary School-masters. He was also a poet, novelist, and orator. The first part of his office was under the Austrian Government. From 1861 he represented Hungary.

Theodor Pauler, 1871-2. His name is associated with a plan of instruction for Classical Secondary Schools, 1871.

August Trefort, 1872-1888. His name will ever be remembered in connection with the famous Secondary School Act, 1883.

Count Albin Csáky, 1888-1894. Among the school reforms associated with his tenure of office are:—The physical education of children, Greek made an optional subject in the curriculum of Classical Secondary Schools, reorganisation of the Educational Council, new law in connection with Kindergartens.

Baron Ronald Eötvös, who only occupied this office for a few months.

Julius Wlassics, 1894 till present time.

The number of children of school age (between 6 and 15 years of age) in Hungary (without reckoning Fiume) in the school year 1897-8 was 2,336,305. Children of
School Age in
Hungary.

Children between six and twelve must attend school daily. They may either pass through the six classes of an Elementary School, or after passing through four classes, enter a Citizen School, or a Secondary School (in the case of boys).

At twelve years of age, children who have passed through the six classes of an Elementary school must attend a Revision school (ismétlő iskola). This course is adopted by the poorer children whose parents wish them to earn money quickly. All Hungarian children are under the control of the school authorities between the ages of six and fifteen years.

The number of children between the ages of six and fifteen who attended school in Hungary during the year 1897-8 was 2,039,485, or about 87·3 per cent. of the whole child population.

The number of children in the schools who speak Hungarian as the mother-tongue is steadily increasing from year to year.

In the year 1897-8 there were 17,058 schools which came under the Elementary Education Act. The following table shows the grade of these schools:—

Number and Grade of Schools.	Elementary Schools	-	-	-	16,725
	Higher Elementary Schools	-	-	-	31
	Citizen Schools	-	-	-	277
	Girls' Higher Schools	-	-	-	25

This table shows that 98 per cent. are ordinary Elementary Schools, consisting of 6 classes. The proportion of schools of a higher character is increasing.

In 1896, in commemoration of the millenary of the Hungarian State, Parliament decided to create 1,000 new schools. Of this number, 200 have been already established, and it is hoped that in five years the whole number will be in working order.

In the year 1897-8 there were 27,717 teachers in the Elementary Schools. Of these, about 20 per cent. are women.

The Hungarian language was in the year 1897-8 the mother-tongue in 59·50 per cent. of the Elementary Schools. This shows a steady increase on previous years.

In 1897-8 there were in Hungary 70 Normal Schools for men and women teachers of Elementary Schools and five for teachers of Citizen Schools. The following tables show their origin:—

(A) Normal Schools for Men Teachers:—

	For Elementary Schools.			For Citizen Schools.		
State	-	-	18	-	-	1
Roman Catholic	-	11	-	-	-	-
Greek Catholic	-	5	-	-	-	-
Greek Oriental	-	4	-	-	-	-
Evangelical	-	6	-	-	-	-
Reformed Church	-	3	-	-	-	-
Jewish	-	1	-	-	-	-
		48			1	

These institutions are in various parts of the country. The one Normal School for training masters for Citizen Schools is in Budapest.

(B) Normal Schools for Women teachers :—

	For Elementary Schools.	For Citizen Schools.
State - - -	5	1
Roman Catholic -	15	3
Greek Catholic -	1	-
Founded by Society -	1	-
	<hr/> 22	<hr/> 4

In 1897-8 there were in Hungary 194 Secondary Schools; of these 162 were Classical Schools, one of which was for girls, and 32 were Modern Schools. Of the 162 Classical Schools 109 were complete schools with eight classes. There were in these 194 schools 58,384 pupils, 82 per cent. of whom were in the Classical Schools and 18 per cent. in the Modern Schools. The following table shows the number of pupils in the schools according to their form of control :—

Under direct State Control - - -	21,178
Under State Supervision - - -	20,099
Greek Catholic - - -	1,004
Evangelical - - -	6,711
Reformed Church - - -	8,560
Societies - - -	360
Unitarian - - -	472

There are 48,318 pupils in the Classical Schools and 10,066 in the Modern Schools.

Of these 58,384 pupils, 54,632 remained until the end of the school year and took part in the annual examination.

In the Classes from V. to VIII. [*i.e.*, four highest classes] of the Classical Secondary Schools were 14,659 pupils. Of these 68.5 per cent. learn Greek. Of the 54,632 pupils who went in for the annual examinations, 21 per cent. failed to pass. One year is spent by the pupil in each successive class.

The 54,632 Secondary School pupils spoke the following languages as mother-tongue in the following proportions :—

Hungarian - - -	41,284	Mother- tongue of Hungaria Pupils in Secondary Schools.
German - - -	6,933	
Roumanian - - -	3,093	
Slavok - - -	1,787	
Servian - - -	1,071	
Ruthenian - - -	104	
Other tongues - - -	360	

The 54,632 pupils belonged to the following religious bodies :—

Roman Catholic - - -	23,722
Greek Catholic - - -	2,310
Greek Oriental - - -	2,766
Evangelical - - -	5,494
Reformed Church - - -	7,815
Unitarian - - -	381
Jews - - -	12,088

Teachers' Salaries.

The scale of Teachers' Salaries according to the law of 1893:—

Teachers in Higher Elementary Schools and Citizen Schools from 900 to 1,300 florins per annum, in addition to which 350 to 400 florins are allowed for board and lodging.

Teachers in Secondary Schools, Training Colleges, and Higher Girls' Schools from 1,100 to 1,800 florins per annum and from 400 to 500 florins for board and lodging.

Directors of Higher Girls' Schools, Secondary Schools, and Training Colleges from 2,400 to 3,600 florins and from 500 to 600 florins for board and lodging.

Teachers' Pensions.

An important Act* passed in 1885 settled the question of teachers' pensions so far as the State schools were concerned.

In 1894 a further Act† was passed including all teachers of all kinds of schools in the pension list.

The following are the pension regulations:—

After ten years' service teachers are entitled to a pension of 40 per cent. of their salary, and after each year's further service the pension increases by 3 per cent., so that at the end of 30 years' service a teacher may retire upon his full salary.

A widow receives, after her husband has served for five years, 50 per cent. of his salary up to 600 florins and 20 per cent. for the remainder. Sons up to 20 years of age, or 24 if they are university students, and daughters up to 18 years of age, receive each one-sixth of the widow's portion to pay for their education.

Teachers contribute to the pension fund one-third of a year's salary above 300 florins, and one-third of every increase in salary. These sums are only paid once. The finance committee of every school pays 5 per cent. of the fixed salary attached to every teaching post in the school.

Each pupil in the Secondary Schools pays three florins yearly, and the National Exchequer sets aside a certain sum each year for the pension fund.

The salaries of men and women are equal, and the pensions also. Women are not disqualified if they marry. A large proportion of the women teachers are married.

The following map is based on the map contained in the latest edition (1896) of the "Hungarian Great Lexicon Pallas."

A higher percentage of literate people is found in the chief towns than in the districts surrounding them.

These statistics are obtained in a very conscientious manner by testing each person individually, and by making local inquiries.

CATHERINE I. DODD.

The Owens College,
Manchester.

* Gesetzartikel, xi., v. J. 1885.

† Ibid., xxvii., v. J. 1894.

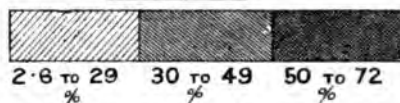
HER DEPENDENCIES IN 1890.

IN TOWNS (DEPENDENCIES)

	%
BELOVÁR	69
BUCCARI	62
ESZER	80
IVANIC	64
KAPRONCA	53
KÁROLYVÁROS	63
KÖRÖS	61
POZSEGA	62
SZISZEK	55
VÁASD	61
ZÁGNÁB	66
ZENGB	61
ZIMONY	58



IN COUNTIES



NB The darkest shading shows the districts where the percentage of literates is highest.

1. The first part of the document is a list of names and addresses of the members of the committee.

2. The second part of the document is a list of names and addresses of the members of the committee.

APPENDIX I.

The following letter, which forms a most valuable supplement to my paper was written by my friend, Dr. Emil Reich, whose intimate knowledge both of Hungary and England makes his opinion of vital importance. He was good enough to peruse my report in proof, and he has kindly given his consent to have the letter printed. I should like to add that race characteristics and other causes may have something to do with the differences he mentions.

CATHERINE I. DODD,

17, Tavistock Road,
Westbourne Park,
London.

Dear Miss Dodd,

August, 1901.

I beg to thank you for your valuable report on the Hungarian system of education, which I have read with great interest and much admiration for your careful and instructive work.

It is with some misgivings that I add the present letter to your report. For, much as I appreciate your very congenial and sympathetic views of Hungary and her educational system, I cannot, alas! but part company with you with regard to many a vital point of that system.

The system of education in the *gymnasia* and *reáltanodák* of Hungary sins, according to my experience, in its very strategy, in the choice of its very object. It aims at making of Hungarian young men of eighteen years, types of those strange creatures whom the Germans aptly call *bildungs-wüthig*. According to the syllabus of weekly lectures to be attended by the better-class youths of Hungary in conformity with ministerial ordinances, such as that dated May 6, 1899, these young men must, from their fourteenth to their eighteenth year of age, attend 28 lectures on the entire curriculum of Knowledge in the course of each week, for nine months and a half every year. And since the home-work entailed upon them cannot possibly average less than three hours a day, the Hungarian youths (at any rate, from the age of fourteen to eighteen) are required to spend *eight* hours a day with the unremitting and arid labour of acquiring purely theoretical knowledge of sciences philological, historical, mathematical, geographical, natural, and philosophical. As against this, their bodily or physical exercises are restricted to *two* hours a week. In other words: the Hungarian youths are excessively surfeited with purely intellectual nourishment, whilst their physical culture is left practically unheeded.

Under such circumstances the Magyar youth cannot but become top-heavy. No doubt many of them know a good deal about various things: nay, I have no hesitation in saying that the average young Hungarian disposes of a far greater amount of book-knowledge than does the average young Briton. My experience of the purely intellectual aspects of the better-class British youth has been both extensive and intense. I have taught hundreds of Oxford and Cambridge men, also younger men from Harrow, Eton, Wellington College, etc., etc., and I cannot help noting, that they excel neither in knowledge acquired nor in the powers of acquiring it. Their memory is indifferent; their imagination cold; their power of mental co-ordination or *rapprochement* feeble. They are by no means *gebildet*; nor do they really care to be so. If anything, some know Greek and Latin well, others know mathematics. That is the *Ultima Thule* of their *Bildung*.

But with all these deficiencies in point of book-knowledge, no sane man can for a moment hesitate to prefer the *ungebildete* British youth to the *hochgebildete* Hungarian young man. The latter speaks fluently, glibly, and on Wagner's operas as well as on the English Cabinet. He is often brilliant and witty, and no mean versificator. He is naturally a good journalist, and

no country has, relatively, better journals than has Hungary. Languages he learns with great facility, and of the literatures of the Western nations he has a wide knowledge.

Not so the Oxford or Cambridge man. Quite the contrary. He speaks with difficulty, and seldom knows more than one language. For, being a man at eighteen, he shares also the well-known incapacity of adults for the acquisition of foreign languages.

I said the British young man is a *man* at eighteen. Here is the whole difference. The Hungarian educational system makes rhetoricians; the British makes men. There is, to my lights, no possible choice between the two systems. Permit me to put my view on a somewhat broader basis.

It seems to me incontrovertible that the modern State cannot develop with equal success all the three great groups of forces inherent in all civilised human beings—the emotional, the intellectual, and the volitional. The first the State must leave to the family, the society, and the Church. The intellectual forces the State ought to cultivate indeed, but surely not at the expense of the volitional.

Thus, *e.g.*, take Hungary. There the State develops the intellectual forces at the expense of the volitional (monopolising all the latter for its own use and benefit). Well, has that colossal amount of works of intellectual supererogation led to any startling feats of the intellect? Does Hungary surprise the world with great inventions, great philosophies, great mercantile enterprises, or great musical compositions? Consider the last alone. Everybody knows how musical the Hungarians are; but nobody can point to first or, for the matter of that, to second or third class musical works written by contemporary Hungarians. Whence that discrepancy? Whence that incongruity between cause and effect?

The answer is simple indeed to the student of British civilisation. Great inventions, great philosophies, great mercantile enterprises, no less than great musical compositions, require considerable intellectual powers indeed; however, in addition to that, and paramountly, they require great volitional powers too. In Leonardo da Vinci, or Mozart, in Newton or Leibniz, or Edison, there were not only great brain powers, but chiefly immense powers of self-reliance, self-control, of will, of perseverance, of manly independence. Now the Hungarian educational system does not cultivate these volitional forces. The British games, these the chief agency in the formation of the British youth's character, are totally absent; in fact, people have no time for such "silly" things in a country where the young man has to toil away eight hours a day over innumerable theories and endless book-lore. The consequence is that all the intellectual masses in the head of a young Hungarian remain inert, or are frittered away in journalism and lower *belles lettres*. The young Briton, in playing his games, steels not only his muscle or that, but first of all his volitional forces. The puny gymnastic exercises at Hungarian gymnasia may indeed strengthen one or another muscle. The volitional forces they leave entirely uncultivated. Nor is there in Hungary any other means of systematically nerving the volitional powers of their youth. I cannot here enter on an examination or suggestion of such means. One thing, however, is certain: the Hungarian System has no such means for the bracing and steeling of will-power, self-reliance, independence, and perseverance, and hence utterly misses its aim. The forces just mentioned are *the* world-moving forces. Can any one studying English history fail to wonder at the curious fact, that England played a decisive rôle in the world's history even at a time when her population, as at the beginning of the eighteenth century, scarcely equalled one-fourth of the population of France, and one-third of that of Germany? But owing to the English system of making men, and not rhetoricians, and that at a very early age too, at eighteen or nineteen: England always possessed as many men as did France or Germany, where manliness is developed only after the age of thirty or thirty-five.

The Hungarian system of education makes rhetoricians, I said. And in that circumstance my countrymen ought to find the explanation of many a puzzle for the solution of which they have so far vainly advanced a motley description of theories, laws and essays. The better-class Hungarian has, up to his eighteenth year, hurriedly gone through so many sciences as to disgust

him for the rest of his life with all serious reading. Moreover, as the rhetorician that he is, he does really think himself sufficiently instructed. He has categories and phrases ready cut for all emergencies. I defy anyone to impress the average Hungarian gentleman of thirty, with any new idea on science or philosophy at all. All novel instruction is diluted by the waters of rhetoric; and it may be said in sober truth, that the very scientific over-training of Hungarian youths, renders them absolutely indifferent to serious reading in after life. Taine is very much admired in Hungary. Let me quote his words as to the ultimate effects of that over-training of the youthful mind.

" . . . lorsque l'acquisition des cadres généraux est aisée et précoce l'esprit court risque de devenir paresseux Souvent, au sortir du collège, presque toujours avant vingt-cinq ans, il possède ces cadres, et, comme ils sont commodes, il les applique à tout sujet; *désormais il n'apprend plus*, il se croit suffisamment muni. Il se contente de raisonner, et fréquemment il raisonne à vide. Il n'est pas au fait; il n'a pas le renseignement spécial et concluant; *il ne sent pas qu'il lui manque*, il ne va pas le chercher, il répète des idées de vieux journal " (Taine, *Notes sur l'Angleterre*, 9^e éd., 1890, p. 335). My painful experience with Hungarians coming to England to study the institutions of this country, fully bears out the statement of the great French thinker in every detail.

You will, I trust, not think me rude in giving such unguarded expression to my disapproval of the Hungarian system of education, which, in your report, appears in such a favourable light. Undoubtedly, the British system undervalues the cultivation of the intellectual forces somewhat too much; in fact, the British youth is brought up in habitual contempt for method, for generalizations, theories, *aperçus*, and for everything outside politics, religion, business or sports. This, it may be submitted, ought not any longer to be tolerated, considering that the above equipments of the modern scientific spirit have been eagerly adopted by most civilized nations, and, if persistently neglected, must cause England to lag behind her numerous rivals. On the other hand, I cannot refrain from warning my countrymen that their system in creating, as it does, a crowd of top-heavy *littérati*, must inevitably prove abortive in the ever-increasing struggle of nations.

Believe me to be, dear Miss Dodd,

Yours faithfully,

EMIL REICH.

APPENDIX II.

The following shows the proportion with regard to age and sex of the children of school age in 1896-7:

Boys from 6 to 12 years	-	-	-	-	1,043,838
Girls " " "	-	-	-	-	1,017,348
Boys from 13 to 15 years	-	-	-	-	454,688
Girls " " "	-	-	-	-	423,226
Total number of children of school age-	-	-	-	-	2,939,100

The percentages are as follows:—

70.13%	of children of school age are between 6 and 12 years.
29.87%	" " " " " 13 and 15 years
50.98%	" " " " are Boys.
49.02%	" " " " are Girls

The following are the proportions according to Religion and Race :—

Roman Catholics	- 49 per cent.	Hungarian	- 52 per cent.
Greek Catholics	11 " "	German	- 12 " "
Greek Oriental	- 13 " "	Roumanian	- 16 " "
Evangelical	- 8 " "	Slavok	- 12 " "
Reformed Church	- 14 " "	Servians	- 3 " "
Unitarian	- 0.39 "	Croatian	- 2 " " almost
Jewish	- 5 " "	Ruthenes	- 3 " "
Others	- 0.01 "	Others	- 0.6 "

Classifying the children in actual attendance in the schools in 1896-7 according to age and sex, we get the following figures :—

Boys from 6 to 12 years	- - - - -	924,337
Girls " " " "	- - - - -	837,939
Boys from 13 to 15 years	- - - - -	330,061
Girls " " " "	- - - - -	249,287

Total number of children of school age in the schools 2,341,624

The classification according to Religion and Language gives us the following :—

Roman Catholic	- - - - -	1,221,641
Greek Catholic	- - - - -	304,286
Greek Oriental Church	- - - - -	242,919
Reformed Church	- - - - -	346,113
Evangelical	- - - - -	199,699
Unitarian	- - - - -	9,020
Jewish	- - - - -	117,705
Others	- - - - -	241

2,341,624

Hungarian	- - - - -	1,267,410
German	- - - - -	316,779
Roumanian	- - - - -	291,864
Slavok	- - - - -	296,060
Servians	- - - - -	63,666
Croatian	- - - - -	36,169
Ruthenes	- - - - -	52,556
Others	- - - - -	17,120

2,341,624

NUMBER OF SCHOOLS, GRADE AND KIND IN 1896-7.

Kind of Schools.	Total.	Elementary.	Higher Elementary.	Citizen Schools.	Girls' Higher Schools.
State	1,359	1,257	8	82	12
Communal	1,910	1,806	10	91	3
Roman Catholic	5,442	5,383	9	42	8
Greek Catholic	2,101	2,098	1	2	—
Greek Oriental	1,789	1,786	1	2	—
Evangelical	1,385	1,373	1	11	—
Reformed Church	2,147	2,142	1	1	3
Unitarian	38	38	—	—	—
Jewish	528	520	—	8	—
Private	162	137	1	22	2
Founded by Societies	90	83	—	7	—
	16,951	16,623	32	268	28

Classifying these schools as Mixed, Boys and Girls', we get the following figures :—

Mixed -	-	-	-	-	-	-	-	-	14,344
Boys' -	-	-	-	-	-	-	-	-	1,234
Girls' -	-	-	-	-	-	-	-	-	1,373

Of the aggregate of Women Teachers, the proportions in the various kinds of schools in 1896-7 were as follows :—

State Schools-	-	-	-	-	-	-	-	-	37 per cent.
Communal Schools	-	-	-	-	-	-	-	-	27 "
Roman Catholic Schools	-	-	-	-	-	-	-	-	17 "
Greek Catholic Schools	-	-	-	-	-	-	-	-	0.9 "
Greek Oriental Schools	-	-	-	-	-	-	-	-	7.9 "
Reform Church Schools	-	-	-	-	-	-	-	-	4.3 "
Unitarian Schools	-	-	-	-	-	-	-	-	4.4 "
Jewish Schools	-	-	-	-	-	-	-	-	12.8 "
Private Schools	-	-	-	-	-	-	-	-	34.8 "
Schools founded by Societies	-	-	-	-	-	-	-	-	35.6 "

These figures show that the tendency in the State schools is to encourage women teachers.

APPENDIX III.

Age of Pupils in Secondary Schools in 1896-7.

Over 9 and under 10 years of age	-	-	-	-	-	-	-	-	61
" 10 " " 11 " "	-	-	-	-	-	-	-	-	2,181
" 11 " " 12 " "	-	-	-	-	-	-	-	-	6,014
" 12 " " 13 " "	-	-	-	-	-	-	-	-	8,150
" 13 " " 14 " "	-	-	-	-	-	-	-	-	8,531
" 14 " " 15 " "	-	-	-	-	-	-	-	-	7,747
" 15 " " 16 " "	-	-	-	-	-	-	-	-	6,162
" 16 " " 17 " "	-	-	-	-	-	-	-	-	4,949
" 17 " " 18 " "	-	-	-	-	-	-	-	-	3,995
" 18 " " 19 " "	-	-	-	-	-	-	-	-	2,887
" 19 " " 20 " "	-	-	-	-	-	-	-	-	1,493
" 20 " " 21 " "	-	-	-	-	-	-	-	-	645
" 21 " " 22 " "	-	-	-	-	-	-	-	-	225
Older than 21	-	-	-	-	-	-	-	-	108

APPENDIX IV.

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PUBLIC INSTRUCTION

IN

S E R V I A.

Summarised translation of "Notice sur l'Instruction Publique en Serbie," published on the occasion of the Paris Exhibition, 1900, by the Ministry of Public Instruction of the Kingdom of Servia.

PUBLIC INSTRUCTION IN SERBIA.

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The Curriculum.

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PUBLIC INSTRUCTION IN SERBIA.

I.—PRIMARY INSTRUCTION.

Primary instruction in Serbia was reorganised by the education law of July, 1898, which divided primary schools into four categories: (A) Elementary schools, comprising infant schools and primary schools for boys and girls; (B) Higher primary schools, comprising continuation schools, higher primary schools for boys ("civil" schools) and higher schools for girls. Organisation and Administration of Primary Instruction.

There are private as well as public primary schools, but all alike are under the supreme control of the Minister of Public Instruction and Public Worship, who prescribes the course of instruction and time table, as well as the practical regulations of the schools and the qualifications and duties of the teachers.

The law of 1898 divided the whole country into nineteen educational areas, each with a school board consisting of the prefect of the county and the county doctor, an engineer, and a delegate from each district. These boards supervise the provision and maintenance of school buildings, manage the educational finances of the county and control the educational policy of the communes.

A.—Elementary Schools.

Here, as elsewhere, the elementary school educates and instructs children of both sexes. The law contemplates separate schools for boys and girls, and the towns and larger villages possess them, so that children of different sexes are not taught together except in the smaller rural communes where there is only a boys' school, which is attended by a small number of girls. Girls' and Boys' Schools.

Attendance at the elementary school is compulsory. A child can only be exempted from regular attendance at the school in which he is enrolled on one of the following grounds: (a) incurable disease or infirmity or contagious illness; (b) extreme poverty and destitution*; (c) the attainment of the age of exemption, namely, for boys fifteen and for girls thirteen years. School Attendance.

The primary school course lasts four years, divided into four grades. The smaller schools, with less than 70 children, are one-class schools under one master (or mistress); schools with more than 70 have two, and those with over 140 children have three masters (or mistresses) and a corresponding number of classes. The School Course.

The school year begins in the urban schools on the 16th of August and in the rural schools on the 1st of September, and finishes on the 15th of June. The School Year.

* Rare in Serbia.

The Curriculum.

The elementary school curriculum for boys and girls, as fixed by law in November, 1899, is given in the following table.

	Subjects.	Classes.				Total.
		I.	II.	III.	IV.	
1	Religious Instruction - - -	2	2	2	2	8
2	Mother Tongue - - - -	8	8	6	6	28
3	National History and Geography	-	-	3	4	7
4	Arithmetic and Geometrical figures.	4	4	4	4	16
5	Natural Science* - - -	-	-	3	3	6
6	Freehand Drawing and Writing -	2	2	2	2	8
7	Manual Work - - - -	2	2	2	2	8
8	Singing - - - -	2	2	2	2	8
9	Gymnastics and Games - -	2	2	2	2	8
		22	22	26	27	97

* With agriculture in the boys' and domestic economy in the girls schools.

Teaching Staff.

In the year 1898-99 there were in Servia 1,921 primary school teachers, 1,034 masters, and 884 mistresses in 1,105 schools.

Appointment

Primary school teachers are appointed by the Minister of Education. In order to be eligible they must have passed creditably through a normal college or a girls' high school according to their sex (although there are actually a very small number of teachers employed in Servian schools who have not fulfilled this condition). they must then have served for two years as candidates, and lastly they have to pass the statutory examination. Except to meet a deficiency of male teachers, mistresses cannot be appointed to boys' schools, and then only to the two lowest classes. They must be unmarried, unless they are the wives of primary school teachers.

Salaries.

The salary of a primary school master commences at 800 francs a year, rising by six five-yearly increments (the first three of 250, the last three of 300 francs) to a maximum of 2,450 francs, which may thus be reached after thirty years' service. Mistresses begin with an annual salary of 750 francs, receiving an increase of 250 francs every five years till a maximum of 2,250 francs is attained. Candidates of both sexes are unpaid. In addition to their salary, teachers receive from their commune free lodging and fuel, or an equivalent pecuniary allowance varying from 50 francs a month in Belgrade to 30 in the smaller towns and 20 in the villages. Moreover the Education Department awards premiums for signal success in the installation of school gardens and in manual training, as well as

indemnities to a maximum amount of 500 francs a year for specially difficult or important services.

Ten years' service entitles teachers of both sexes to a pension **Pensions.** in case of incapacity from mental or bodily affliction or any other cause, and all alike can claim a retiring pension, equal in amount to their salary at the time of retirement, after thirty-five years' service. The pensions are defrayed by the national exchequer, the salaries being, by the law of 1898, charged to the communal authorities, or, in the case of Belgrade and Nisch, to the municipalities.

NUMBER OF MASTERS and MISTRESSES EMPLOYED in PRIMARY SCHOOLS at VARIOUS SALARIES.

	Frcs.	Frcs.	Frcs.	Frcs.	Frcs.	Frcs.	Frcs.	Frcs.	Frcs.	Frcs.	Totals.
Salaries -	2450	2150	1850	1550	1300	1050	800	600	580	505	—
Number of Teachers -	9	40	82	124	240	432	783	83	1	7	1,816
Percentage -	0·50	2·20	4·52	6·83	13·71	23·79	43·12	4·90	0·05	0·38	100·00

Before 1890 Government inspection of the schools was **Inspection.** confined to the end of the school year, and was carried out by specially appointed delegates from the Education Department. But the special Government grants mentioned above being allocated strictly according to results, an organised system of Government inspection was required and was inaugurated by the law of 1890, which assigned a permanent inspector to each of the nineteen educational districts and one to Belgrade.* Each of these inspectors has from eighty to a hundred and fifty teachers under his supervision, and is required to visit every school in his district at least three times in the course of each school year. Inspectors are appointed by royal ukase from amongst members of the teaching staff of normal and secondary schools having over ten years' service; or, failing this source of supply, higher primary schoolmasters of over ten, and distinguished primary school teachers of over fifteen years' service, are eligible. The inspectors are divided, according to their salaries, into five classes, in each of which they must serve at least five years, the salaries rising from 2,500 francs in the lowest, to 4,500 francs in the highest class. Each inspector also draws a travelling allowance of from 1,000 to 1,200 francs. Thirty years' service confers the right to a retiring pension.

In conclusion, the following tables give some statistical **Statistics.** information as to the number and condition of primary schools

* For all administrative purposes Belgrade forms a province by itself.

and their increase in proportion to the population during a given period, and the following:

NUMBER OF PUPILS IN THE ELEMENTARY SCHOOLS IN 1895.

	Number of Pupils	Boys	Girls	Population to one pupil		Population in general to one school
				Males	Females	
Total	10,000	5,000	5,000	100	100	100
Boys	5,000	5,000	0	100	0	100
Girls	5,000	0	5,000	0	100	100

NUMBER OF PUPILS IN PRIMARY SCHOOLS IN 1895.

	Boys	Girls	One Male pupil per 100 of Population	One Female pupil per 100 of Population	One pupil per 100 of Population
Total	10,000	5,000	100	100	100
Boys	5,000	0	100	0	100
Girls	0	5,000	0	100	100

SCHOOL BUILDINGS IN 1895.

Population	Area	Area per pupil	Area per teacher	Area per pupil	Area per teacher	Area per pupil	Area per teacher	Area per pupil	Area per teacher
10,000	100	10	10	10	10	10	10	10	10

PERCENTAGES.

100	100	100	100	100	100	100	100	100	100
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INCREASE IN NUMBER OF ELEMENTARY SCHOOLS.

Population	Year	Schools	Teachers	Pupils	One school per	One Teacher per No. of Inhabitants	One pupil per No. of Inhabitants
					Square Kilometres	Number of Inhabitants	Number of Inhabitants
915,000	1845	173	187	5,000	217	3,289	4,772
990,000	1855	214	206	9,716	187	3,246	3,214
1,016,000	1865	291	290	14,004	117	3,789	3,048
1,033,000	1875	323	367	23,238	79	2,325	2,000
1,061,000	1885	345	375	41,703	86	3,306	2,087
1,071,000	1895	377	1,816	73,522	49	2,267	1,274
	1890	1,105	1,921	85,887	44	2,093	1,204

B.—Higher Primary Schools.

So rapid has been the progress of the continuation schools, that, although they only came into existence in 1899, they already number 176, 19 in the towns, and 157 in the villages, generally in places which have neither a civil school for boys nor a higher girls' school. The aim of the continuation schools being to keep up and complete the instruction received by the children in the elementary schools, their curriculum is the same as in the latter, with the addition, at the discretion of the master and in compliance with local conditions, of certain branches of agricultural training, such as vine and apple culture, and bee-keeping. As a rule the continuation school teaching is in the hands of the local primary schoolmaster. The course lasts two years; the schools being open sometimes only during certain months of the year, sometimes only in the afternoon, or again only in the morning, either exclusively on working days or only on holidays as local circumstances dictate.

Higher primary schools for boys ("civil" schools) were created by a recent law (1898) with a twofold object, namely to continue the work of the elementary school, and at the same time to prepare their pupils for civic and industrial life. To obtain admittance to these schools boys must have passed through the whole elementary school course and not be more than fifteen. The course lasts three years. The urban and rural schools are differentiated, the former laying more stress on commercial and industrial subjects, the latter on agricultural training; but, as yet, only urban higher primary schools exist using the following programme:—

Subjects.	Classes.			Total.
	I.	II.	III.	
Religious Instruction - - -	2	2	3	7
Mother Tongue - - - -	4	3	3	10
History and Geography - - -	3	3	3	9
Arithmetic and Geometry - - -	3	4	4	11
Natural History - - - -	2	2	2	6
Elements of Political Economy and Book-keeping	2	2	3	7
Manual Work - - - -	2	2	3	7
Freehand Drawing - - - -	2	2	2	6
Writing - - - -	2	2	—	4
Singing - - - -	2	2	2	6
Gymnastics - - - -	2	2	2	6
German or French (Optional) - -	(4)	(4)	(4)	(12)
Total No. of hours - -	26	26	27	79
or	(30)	(30)	(31)	(91)

Teaching Staff.

The teaching staff of these schools is recruited either from primary school teachers, who are eligible after ten years' service, and on passing a qualifying examination, or from candidates for secondary school professorships,* who have passed either this examination or the qualifying examination for secondary school teachers. The salaries commence at 1,800 francs a-year, increasing every five years by 360 francs to a maximum of 3,600 francs. At the beginning of the year 1899-1900 there were 17 of these schools, with 30 classes, 39 masters and 838 scholars.

Higher Primary Schools for Girls—Aim.

The higher primary girls' schools have the same twofold aim as the corresponding boys' institutions, continuing the girls' general education, and training them in needlework and house-keeping. The pupils must have completed the elementary school course before entering the higher school, where the instruction lasts three years, and embraces the following subjects:—

Curriculum.

Subjects.	Classes.			Total.
	I.	II.	III.	
Religious Instruction - - -	2	2	2	6
Mother Tongue - - - -	4	3	3	10
History and Geography - - -	3	3	3	9
Natural History - - - -	2	2	2	6
Domestic Economy - - - -	—	—	2	2
Mathematics - - - - -	3	3	3	9
Manual work - - - - -	4	4	4	12
Writing - - - - -	2	2	—	4
Drawing - - - - -	2	2	2	6
Singing - - - - -	2	2	2	6
Gymnastics - - - - -	2	2	2	6
Total No. of Hours -	26	25	25	76
German or French (optional) - -	4	4	4	12
Instrumental music „ -	2	2	2	6

Teaching Staff.

The mistresses of these schools are chosen from amongst the most able primary school teachers of over ten years' standing, and must pass a qualifying examination. Their salaries rise by five-yearly increments of 250 francs from a minimum of 1,500 francs to a maximum of 2,750 francs. These schools only came into being in 1899-1900, and up to the present the six schools in existence are all of them boarding-schools. They have 9 classes, 11 mistresses, and 205 pupils.

All higher primary school teachers' salaries and pensions are paid by the State.

* See below.

II.—SECONDARY INSTRUCTION.

The first organisation of secondary instruction in Serbia dates from 1844, and has been modified by a series of laws, the regulations actually in force dating from an Act passed in 1898. This Act divides secondary schools into two categories, according as they have eight classes (complete school, "real" school, gymnasium), or only six or four (incomplete school). In the complete schools the course of instruction lasts eight years, four of which are passed in the junior and four in the senior division. In Serbia all secondary schools combine the attributes of the classical and modern school according to the curriculum indicated in the following table.

Secondary
Schools for
Boys—Or-
ganisation.

Curriculum.

Subjects.	Classes.								Total.
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	
Religious Instruction	2	2	2	2	2	2	—	—	12
Mother Tongue	4	4	4	4	4	4	4	4	32
German	4	4	3	3	3	3	3	3	26
Latin	—	—	5	5	4	4	4	4	26
French or Greek	—	—	—	—	5	5	4	4	18
Geography	3	2	2	2	1	1	—	—	11
Servian & General History	—	2	2	2	3	3	3	3	18
Natural History (Mineralogy and Chemistry)	2	2	—	3	2	2	2	—	13
Physics	—	—	3	—	—	—	4	3	10
Mathematics	5	5	4	4	4	4	4	4	31
Philosophy (propædæutic)	—	—	—	—	—	—	—	3	3
Freehand Drawing	2	2	2	2	—	—	—	—	8
Writing	2	1	—	—	—	—	—	—	3
Singing	2	2	—	—	—	—	—	—	4
Gymnastics	2	2	2	2	2	2	2	2	16
Total	28	28	29	29	30	30	30	30	234

Besides two complete schools of this type, there are in Belgrade under the same administration, a modern "real" school and a classical school. The latter, founded in execution of the law of 1898, has as yet only the two lowest classes. The curricula of both schools are given in the following tables.

Modern and
Classical
Schools at
Belgrade.

TIME TABLE OF THE BELGRADE MODERN SCHOOL.

Subject.	Classes.								Total.
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	
Religious Instruction -	2	2	2	2	1	1	-	-	10
Mother Tongue -	4	4	3	3	3	3	3	3	26
German -	4	4	3	3	3	3	3	3	26
French -	-	-	5	5	4	4	4	4	26
Geography -	3	2	2	2	2	1	-	-	12
General and Servian History.	-	2	2	2	2	2	2	3	15
Natural History -	2	2	-	-	3	3	3	-	13
Physics and Mechanics -	-	-	3	-	-	-	4	5	12
Chemistry and Technical Chemistry.	-	-	-	3	3	4	-	-	10
Mathematics -	5	5	5	5	5	5	5	4	39
Descriptive Geometry -	-	-	-	-	-	-	2	2	4
Freehand Drawing -	2	2	2	2	2	2	2	4	18
Writing -	2	1	-	-	-	-	-	-	3
Singing -	2	2	-	-	-	-	-	-	4
Gymnastics -	2	2	2	2	2	2	2	2	16
Total - - -	28	28	29	29	30	30	30	30	342

TIME TABLE OF THE BELGRADE CLASSICAL SCHOOL.

Subjects.	Classes.								Total
	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	
Religious Instruction -	2	2	2	2	2	2	-	-	12
Mother Tongue -	3	3	3	3	4	4	4	4	28
German -	3	3	3	3	3	3	3	3	24
Latin -	5	5	5	5	5	5	5	5	40
Greek -	-	-	4	4	4	4	4	4	24
Geography -	2	2	2	2	1	1	-	-	10
Servian & General History	-	2	2	2	3	3	3	3	18
Natural History and Chemistry	2	2	-	2	2	2	2	-	12
Physics -	-	-	2	-	-	-	3	3	8
Mathematics -	4	3	3	3	4	4	4	3	28
Philosophy (propædæutic)	-	-	-	-	-	-	-	3	3
Freehand Drawing (optional)	(2)	(2)	(2)	(2)	-	-	-	-	(8)
Writing -	2	1	-	-	-	-	-	-	3
Singing -	2	2	-	-	-	-	-	-	4
Gymnastics -	2	2	2	2	2	2	2	2	16
Total - - -	27	27	28	28	30	30	30	30	230
	(29)	(29)	(30)	(30)	-	-	-	-	(238)

In 1895 there were 26 secondary schools in Servia, of which nine were complete schools, a number so excessive that it was reduced to eleven by the law of 1898, five schools having the complete eight classes (two in Belgrade, and three in the provinces), four schools having six, and two four classes. Besides the eleven state schools there are six private institutions of the same type (two with six and four with four classes). The public and private schools are under the supervision of the Minister of Public Instruction.

The following table gives the number of pupils and classes in the eleven government secondary schools in 1898-99:—

Schools.	Number of Classes.	Subdivided Classes.	Number of Pupils.	Number of Professors.
King Alexander I.'s School (Belgrade)	8	22	954	56
Vouk Steph. Karadjitch's School (Belgrade)	8	17	635	42
Prince Miloch The Great's School (Kragujevac).	8	13	490	28
King Milan I.'s School (Nisch)	8	11	454	24
Dosithee Obradovitch's School (Zajecar)	8	9	319	21
Steph. Nemanja's School (Vranja)	6	6	191	17
Prince Michael's School (Pozarevac)	6	7	362	14
Jevrem Obrenovitch's School (Sabac)	6	7	285	15
Jovan Obrenovitch's School (Cacak)	6	6	266	13
Valjevo School (Valjevo)	4	4	220	11
Saint Sava's School (Piot)	4	4	124	12
Total	72	102	4,300	253

Whenever the number of pupils in a class exceeds the maximum laid down by the new law of 50 in classes I.-IV., 40 in classes V. and VI., and 30 in classes VII. and VIII., the class must be subdivided into parallel sections.

Of the 4,300 boys in secondary schools in 1899, 4,195 were Servians, 74 were Jews, and 31 belonged to other nationalities; 1,113 boys were the sons of public functionaries, 205 of ecclesiastics, 249 of teachers and professors, 1,267 of merchants, 484 of industrialists, 563 of agriculturists, and 339 of parents in various occupations, members of the liberal professions, artisans, &c.

The school year commences for the secondary schools between the 11th and 24th of August, and closes between the 15th and 28th of June, being divided into three terms by holidays of ten days at Christmas and Easter.

In order to obtain admittance to the lowest class of a secondary school, boys must be over ten and under thirteen, must have completed the elementary school course and must pass an entrance examination. After this there are only two examinations in the

Number of
Schools.

Number of
Pupils.

Entrance
Conditions
and Exami-
nations.

school course, one at the end of the junior course (4th year) and the leaving examination at the end of the senior class (8th year), the pupils passing from class to class according to their year's work without examination.

School Fees.

Teaching Staff.

For the first time in secondary schools the law of 1898 imposed annual school fees of forty francs in the senior, and twenty in the junior division. Poor and meritorious pupils may be exempted from this payment, but no exemptions are allowed from the entrance fee of 5 francs which is paid by all the pupils, and is applied to form a fund in aid of poor scholars. The annual fees cover office expenses and the provision of teaching material and apparatus. In passing we may remark that the total expenditure on secondary schools in 1899 amounted to 745,356 francs.

Every secondary school is managed by a director, who not only has the control of administration and instruction, but has also, except in special cases, to teach from five to twelve hours a week. All professors of ten years' standing can become directors of incomplete schools, while directors of incomplete schools and professors of fifteen years' standing are eligible as directors of complete schools. The director of an incomplete school, whose appointment is only provisional, receives 600 francs a year, in addition to his ordinary salary as professor; while the directors of complete schools, whose appointments are permanent, are divided into two classes, receiving salaries of 6,000 francs and 5,000 francs respectively. All alike are entitled to free fuel and lodging in the school building.

The teaching staff under the directors consists of professors, assistant-professors, and masters for special subjects, such as languages (unless these are taken by a professor), instrumental music, singing, drawing, and gymnastics. Students leaving the philosophical faculty of the College at Belgrade or of a university can become candidates for secondary school professorships. They must teach as candidates for at least two years in order to be admitted to the qualifying examination which enables them to become assistant professors. In this capacity, or as master in a higher primary school, they must serve at least three years before they are eligible to professorships.

Professors and assistant professors are appointed by royal ukase. They are required to give from 15 to 18 hours' tuition a week. Candidates are nominated by the Minister of Education; they act as assistants to the professors, for whom they have also to prepare papers on given scientific subjects.

Salaries and Pensions.

The salary of a secondary school professor commences at 2,400 francs, rising by five-yearly increments of 600 francs to a maximum of 5,400 francs after 25 years' service. Directors and professors are entitled to a retiring pension, equal in amount to the salary of their last active year, after thirty-five years' service, counting from their appointment by royal decree. Assistant professors draw a salary of 2,100 francs, and candidates receive a

State grant which varies from 960 to 1,200 francs a year. The masters for special subjects are of two grades, with salaries rising from 1,200 to 2,500 francs, and from 2,100 to 4,000 francs respectively; they are entitled to a retiring pension equal to their last active year's salary after thirty-five years' service. Every secondary school has a medical man attached to it, who is remunerated in proportion to the number of pupils.

In 1899 there were in secondary schools:—

- 133 Professors and Directors,
- 41 Assistant Professors,
- 8 Masters of the 1st grade,
- 37 Masters of the 2nd grade,
- 24 Candidates,
- 10 Honorary Masters,

making a total of 253 persons, the sum of whose salaries amounted to 677,322 francs.

At the present time Serbia has two high schools for girls—one at Belgrade and one at Kragujevac. According to the new curriculum drawn up in 1899 the instruction in the junior divisions is arranged to correspond with the work done in the higher primary girls' schools, in order that students may pass from such schools into the senior division of one or other of the high schools. The high school at Belgrade has actually six classes, with 17 sections and 580 pupils, while the Kragujevac school has six classes, with a total of 204 pupils. The two schools cost the State 96,220 francs annually, and they spend 8,700 francs in teaching material and apparatus.

Since 1898 these schools have been managed by directors who have the standing and salary of secondary school directors. The instruction is given by mistresses drawn, in accordance with the provisions of the same law, from the regular students of the Belgrade college or of foreign colleges or universities, as well as from teachers of five years' standing in primary or of three years' standing in higher primary schools. Their salaries commence at 1,500 francs, increasing by 250 francs every five years to a maximum of 3,000 francs, and after thirty-five years' service they are entitled to a pension equal to the highest salary they have drawn. Should the supply of competent mistresses prove insufficient it may be supplemented by the appointment of professors from the secondary schools, who retain their rank and salary. The active staffs of both schools at present number 5 professors, 30 women professors, 10 mistresses, and three honorary mistresses.

Secondary
Schools for
Girls at Bel-
grade and
Kragujevac

Teaching
Staff.

Salaries

III.—SPECIAL SCHOOLS.

The Grand Seminary at Belgrade.

This is one of the oldest educational institutions in Serbia, having been founded in 1836, and prepares students for the priesthood, giving an exclusively theological training in a four

years' course. Until now the seminary has drawn its pupils from the junior division of the gymnasium, but a law which was passed in 1896, and made fundamental modifications in the organisation of the seminary, restricts admittance to pupils leaving elementary schools, at the same time increasing the course to nine years and excluding day scholars. Owing to this latter provision the law cannot come into operation until the necessary buildings have been provided, which are to be erected in the near future at Belgrade.

At the present time the seminary has 224 students, and costs the State 37,220 francs a year. The professors take rank with, and have the same salaries as, professors in secondary schools; they have all been through a theological course in Servia, and have completed their studies in Russia.

Normal Schools for Primary Teachers.

There are at the present time two normal schools in Servia, one at Alexinac and the other at Jagodina, both created by an Act of 1870. In order to be accepted as students, boys must have passed creditably through at least the junior sections of a gymnasium. The course lasts four years, a temporary reduction to three in 1886 having been cancelled in 1896. The professors rank with secondary school professors, but they do not share in the increase of salary secured to the latter by the law of 1898, so that in their case the old scale of salaries, from 2,270 to 5,000 francs, remains in force. These teachers have been educated at a gymnasium, or a college, or at the normal school, and sometimes at a foreign university or college.

In 1898-99 the two normal schools had 19 professors and 20 students, and they cost the State 91,571 francs.

IV.—HIGHER INSTRUCTION.

The University College at Belgrade.

This college has three faculties: philosophy, law and technology, each of which is subdivided into sections, and gives a four years' course.

The curricula of the three faculties are as follows:—In each section the entire course of lectures and examinations are compulsory for students of that section.

Faculty of Philosophy. (4 sections.)

Faculties and
Curricula.

Linguistic and Literary Section.—Serbo-slav philology: Yougo-slav literature: Latin, Greek, French and German language and literature: Rhetoric: Pedagogics: Philosophy: Russian language and literature: Ancient History.

Optional Subjects:—Polish and Czech language and literature.

Historical and Geographical Section.—Geography: Ethnography: History of the Servs: General History: Pedagogics: Philosophy: Latin: Greek: Archæology

Mathematical and Physical Section.—Mathematics: Mechanics: Descriptive Geometry: Astronomy: Physics: Meteorology: Chemistry: Pedagogics: Philosophy.

Natural Science and Chemistry Section.—Chemistry: Mineralogy: Geology: Zoology: Comparative and Physiological Anatomy: Botany: Palæontology: Physical Geography: Physics: Pedagogics: Philosophy: Hygiene (optional).

Faculty of Law. (2 sections.)

Juristic Section.—Civil and Criminal law and procedure: Commercial law: Private international law: Forensic medicine.

Economic Section.—Jurisprudence: Administrative law: International law. Economics: Science of finance: Statistics (students in each of these sections have to take the principal subjects in both sections).

Faculty of Technology. (3 sections.)

In the three sections of this faculty—engineering, architecture and mechanics—the courses follow the same lines as in the corresponding sections of technical schools, with a complete course of higher and applied mathematics.

The college possesses chemical and physical laboratories, an astronomical and meteorological observatory, geographical, mineralogical, geological and zoological collections, and a botanical garden (Jevremovac).

Besides lectures, classes are held in languages and history of literature, history, mathematics, and pedagogics.

The college is governed by a rector elected by the Academical Council from its own body for one year; he is assisted by a Dean elected in the same way. The council of each faculty chooses a president from amongst its professors every four years.

The professional staff consists of ordinary and extraordinary professors, appointed by royal decree, the posts being open to Professional competition; and of honorary professors, lecturers and readers appointed by the Minister of Public Instruction in consultation with the council of the faculty concerned.

In 1899 the teaching body of the college numbered—

Faculties.				
	Philosophy.	Law.	Technology.	Total.
Ordinary Professors -	13	7	11	31
Extraordinary " -	6	2	—	8
Honorary " -	1	1	6	8
Lecturers -	5	1	—	6
Assistants -	3	—	—	3
Apparitor -	1	—	—	1
Reader -	—	—	—	1

Number of
Students.

In 1898-99 the students of the college numbered :

Faculty of Philosophy	107	} 438
" " Law	259	
" " Technology	72	

Of these 428 were Servians and ten foreigners (Jews, Germans, and Italians), 19 were sons of ecclesiastics, 87 of public functionaries, 17 of professional men, 27 of professors, 173 of merchants, 25 of industrialists, 87 of agriculturists, and 3 of domestic servants. In 1899 the college cost the State 329,420 francs. Besides this, an annual subvention, accorded by His Majesty King Milan and continued by King Alexander I., provides prize for the best work of students in all the faculties.

COMMERCIAL EDUCATION IN JAPAN.

The view that the political, and to some extent even the moral, well-being of a nation depends in a large measure on its material welfare has been more generally entertained by the Japanese since their country was opened to the influences of Western civilisation. The active advance of European nations in the East—an advance sometimes made by means of religious agency, sometimes by the sword—has greatly affected the ideals of the inhabitants of the Mikado's Empire. Formerly, under the influence of Buddhism and Confucianism, they conceived tranquillity of spirit and a refined and artistic enjoyment of life to be the main objects of human existence, and they were consequently well content with a social system based on a hierarchy of inherited ranks and crafts. But the opening of the door to Western influences and the introduction of European material civilisation had an astonishing effect on the Japanese. They became to a great extent converted to the doctrine of extreme commercialism. Large numbers of their leading men came, rightly or wrongly, to the conclusion that the social principles which they had learned from their fathers were in effect barriers to the working of the law of natural selection; and under the influence of much that came to them from the West, they became firmly convinced that the most important element in a nation's strength was material and commercial welfare, without which, they felt themselves impelled to believe, the rôle of Japan would in the future be that of India or of Egypt.

Though it will be generally agreed that the spirit of Western commercialism has thus had an excessive, and what may prove to be in fact but a temporary, influence on Japanese thought and character—an influence due in some measure to an imperfect understanding of the deeper sanctions and higher types of Western character,—it is indisputable that the disintegration of the older ideals of Japanese life has had an important effect on national institutions.

Under the influence of the conviction that it was supremely important to increase the material wealth of the country, the Japanese have boldly tried to adopt every measure which might conduce to that end and to remove every obstacle to its rapid and effective attainment. Advisers to the Government, professors of all branches of learning, and artisans of all kinds have been called in from Europe and America. Government officials and students have been incessantly sent abroad for study, and whatever was considered good and practicable was introduced from all advanced countries, and was first undertaken by the Government, whose lead and example the people had to follow.

Indeed, all modern institutions in Japan have been borrowed from Europe and America in this manner; and the best parts of all different systems have been adopted.

Commercial education, among other things, was considered by the first Cabinet of the present Emperor to be very important for promoting the foreign trade of Japan. The origin of commercial schools in Japan dates back to the year 1875, when a private business school was first established in Tokio by the late Viscount A. Mori. Ten years after the establishment of this first institution one commercial school of the highest standard, which absorbed the first one, was instituted in Tokio by the Central Government, and since then several others of lower footing have been opened by different municipalities. The former is now called the Kōtō Shōgiō Gakkō (Higher Commercial College), and is by far the most important commercial school in Japan. It assumes the position of being the central institution of commercial education of the Empire, where the annual meetings of the directors of different commercial schools take place and the policy to be pursued by them is to be determined.

There are at present 27 public commercial schools in Japan, inclusive of the Higher Commercial College of Tokio, scattered all over the country, and no less than 300 well-trained young men enter the business life of the Empire from these schools every year.

These schools can be classified into three divisions according to their different footing. They are:—

1. The Higher Commercial College.
2. Ordinary Commercial Schools.
3. Elementary Commercial Schools.

The Higher Commercial College of Tokio belongs to the first class. It is said that another institution of the same footing will be established in Osaka by the Central Government. The second class consists of the commercial schools of Osaka, Yokohama, Kobé, Kioto, Nagoya, etc. The elementary commercial schools are those of Yokkaichi, Kagoshima, Kurume, Toyama, Shizuoka, etc.

The ordinary and elementary commercial schools, although they are municipal organisations, are partly supported by the Central Government. The Minister of Education is entitled to grant them, at his discretion, a certain annual subsidy out of the fund set aside in the budget for that purpose.

Besides these public institutions, there are numerous minor private commercial schools in large cities, but they, with a few exceptions, are something of the same nature as petty business schools in America, and of comparatively little importance.

In explaining the *modus operandi* of commercial education in Japan, I cannot do better than to describe the Higher Commercial College of Tokio, inasmuch as it is the highest one, and the municipal schools are simply following the lead of this central institution. It must be borne in mind, however, that although the Higher Commercial College of Tokio leads all municipal

commercial schools, the subjects of study taught in the latter differ from those pursued in the former, and are both less in number and elementary in character. They are mostly determined in accordance with the needs of the respective cities in which the schools are found.

When the Higher Commercial College of Tokio was organised by the Department of Education in 1885, the system adopted was that of the *Institut Supérieur de Commerce d'Anvers* with a slight modification. But after a few years' experience, and in face of the successive establishment of municipal commercial schools, the standard of the College has been raised far above that of the Antwerp Institute. The raising of the standard, and the advance in the position of the College among educational institutions in Japan, are mainly due to the admirable efforts of Mr. Jiro Yano, who filled the office of director from 1885 to 1893, and Mr. Kenzo Koyama, who held the same position from 1895 to 1898.

Students were sent to Antwerp and Paris for study by the Government for the College, and upon their return they were appointed professors. In addition to the Japanese professors, several foreign professors for commercial subjects and languages have been called in; also Japanese and foreign professors of the Imperial University of Tokio, the College of Navigation, etc., as well as some judges of the Supreme Court and the Tokio Court of Appeal for various other subjects of study, have been engaged by the College.

The Government has been sending students abroad continuously for the College. At present there are six of them studying in different countries, viz., 2 in Germany for the study of economic history and public finance, 2 in Belgium for insurance and railways, 1 in England for banking and speculation, 1 in France for commercial law, 1 in United States for railways. In addition to these six, some more are, it is said, to be sent to England before long to study shipping and warehousing.

The faculty of the College, according to the calendar for 1898-1899, consists of 15 Japanese professors, 6 foreign professors (1 Belgian, 2 English, 1 French, 1 Italian, and 1 Chinese), 16 lecturers, and 8 assistant professors. Attached to the College there is a school, called the School of Foreign Languages, whose professors also teach the students of the main institution. The faculty of that school consists of 7 Japanese professors, 8 foreign professors (1 German, 1 Russian, 1 English, 1 French, 1 Spanish, 1 Chinese, and 2 Korean), 4 lecturers, and 3 assistant professors.

The number of the students of the Higher Commercial College is now a little more than 500, and that of the School of Foreign Languages is about 200.*

The standard of the Higher Commercial College is the same

* In 1899 the School of Foreign Languages separated itself from the Higher Commercial College, and became an independent institution under the direct control of the Department of Education. Some professors, however, continue to teach both of them.

as that of the Imperial University Colleges. The matriculation is made in the following manner :—

Those who have passed, with honours, from public and private Middle Schools approved by the College, and from such Government and private schools as are recognised to be on the same footing as the above, have, up to a certain number, the privilege of being admitted without examination into the Preparatory Course of the College.

All other candidates for admission must pass an entrance examination in the following subjects :—

Japanese.
Chinese.
English.
Japanese Penmanship.
Japanese Composition.
Arithmetic; Algebra; Geometry, plane and solid; Elementary Trigonometry.
Geography and History of Japan and other countries
Drawing—Freehand and Mechanical.
Physics.
Chemistry.
Zoology, Botany, and Mineralogy.
Gymnastics.

The course of instruction extends over one year in the Preparatory Course, three years in the Principal Course, and two years in the Professional Department or the Post-graduate Course, making a total of six years.

The courses of study are as follows :—

I.—THE PREPARATORY COURSE—ONE YEAR.

(a.) Japanese Penmanship	-	-	-	-	-	2
(b.) Japanese Composition	-	-	-	-	-	3
(c.) English	-	-	-	-	-	9
(d.) Mathematics—Higher Algebra and Trigonometry	-	-	-	-	-	4
(e.) Book-keeping	-	-	-	-	-	3
(f.) Applied Physics	-	-	-	-	-	2
(g.) Applied Chemistry	-	-	-	-	-	3
(h.) French, German, Chinese, Korean, Russian, Italian or Spanish	-	-	-	-	-	3
(i.) Commercial Morality	-	-	-	-	-	1
(j.) Gymnastics	-	-	-	-	-	3
Total No. of Hours per week						33

The last two subjects—Commercial Morality and Gymnastics—require special attention.

For the last twenty years the Department of Education has maintained that education, whether common or special, must

have three distinct constituents, viz., Intellectual, Physical, and Moral Culture.

By putting the subject of Morality in the schedule of studies of the Higher Commercial College, the Department of Education aims at promoting morality in business life, and setting up for the municipal commercial schools a standard of teaching on that subject in order to attain the desired end throughout the Empire.

The course in this subject, therefore, aims to explain what are the public and private virtues of business men, and to make the students understand the importance of them.

The method of instruction is in the form of lectures in the following order :—

1. Exposition of the Outline of Modern Ethical Science.
2. Explanation of the Nature of Commercial Morality from the Standpoint of that Science.
3. Suggestions on the Methods of forming Various Virtuous Habits connected with that Morality.

The lecturer in charge of this important subject is Dr. Prof. R. Nakajima of the Imperial University of Tokio.

It is very strange that the subject of Commercial Morality and its importance do not seem to have received any attention by Commercial Schools in other countries.

Neither the Institut de Commerce at Antwerp, nor the École Supérieure de Commerce de Paris, nor the Oeffentliche Handels-lehranstalt zu Leipzig has this subject in its schedule of studies.

Nor do American commercial educationists seem to recognise the importance of this subject at all. Last year when I visited the University of — I happened to speak on this subject to a member of the faculty of the — Institute. Curiously enough the distinguished gentleman did not seem to understand what is meant by Commercial Morality. I visited all business colleges, so to speak, of repute both in the U.S. and in Canada while I was staying in those countries. While most of them cannot make any claim that they give more than elementary instruction in book-keeping and typewriting to young people of both sexes, there is none where the important subject of Ethics has received any attention.

It may be argued that this side of culture can be advantageously entrusted to the Church, and the schools had better look to the intellectual side only. But as long as there prevails in the business community the absurd notion that business is outside of the domain of the teachings of the Church and of the principles of Ethics as well, there is no excuse for the commercial educationists to ignore this important subject of our enlightened business life.

In the opinion of the present writer, it would be an error to regard instruction in the tenets of a particular faith as the only, or indeed the chief, means of promoting morality among a people. Experience seems to show that a more potent instrument to that end is to be found in the personal example of the teachers, and in the life actually led by those who have embraced the particular

form of religious belief. And though he would readily admit that in each individual case there may be a close connection between the strength of the moral life and certain truths firmly held by the mind, he would submit that, where religious differences make it impracticable to teach any form of dogmatic religion, Ethics should find a place in the curriculum, and that on this, as on a common ground, Roman Catholics, Protestants, Jews, Buddhists or Mohamedans might (at any rate so far as a large part of conduct is concerned) agree to meet.

The sharp bargaining spirit which seeks to get wealth away from its possessors by all methods tolerated by imperfect law which, in too many cases, is inconsistent with morality, is characteristic of these degenerate days of our Competitive System. Trade is, however, actually held in greater honour than it deserves; a part of our respect for it is due to our peculiar blindness to its defects. Let us withhold our respect until it is due, and, that we may justly honour trade, let us make it honourable.

A perfect ideal of character and conduct usually serves the purpose rather of a beacon than of a goal. Like the star toward which the sailor steers, it is a thing never to be reached, but only distantly approached. Yet the pilot who depends on a star for direction is in peril of life if he loses sight of it; and something similar to this is true of a society which loses sight of its moral ideal. No fog ever baffled a sailor more completely than the dual code of morality, the outgrowth of a degenerate mercantile system, which has blinded and baffled the people all over the world. The true standard of business dealing has been hidden; it needs to be brought to the light and placed where all may see it. Though it were never reached, it would make all the difference between success and failure, if our course could be turned toward it instead of from it.

With regard to Gymnastics, the synopsis of the Higher Commercial College of Tokio gives the following categories:—

1. Light and Heavy Gymnastics.
2. Military Drill and Target Practice.

It may seem very queer, especially to the English and American minds, that a college of university standard has Gymnastics in its schedule of studies. A little consideration, however, will reveal to them the importance attached to this branch of culture.

There are at least two reasons for it: 1st, a social reason; 2nd, a political reason.

That the good physique and sound health of the people is essential for their social integrity requires no explanation. It is the very basis of physical culture.

As to the political reason, the importance of which will be easily understood by most European peoples, it has long been the aim of the Japanese Government to have a sufficient number of trained soldiers at its command, in addition to the standing army and the reserves, to provide against emergency. It is not at all strange, therefore, to find that middle schools, normal schools, technical schools, and various other colleges and schools

keep great numbers of rifles for the use of their students and train them under military discipline.

Another necessity of training students under military discipline is to make them prepare for one year's military service after their graduating. Military service in Japan is compulsory without discrimination, but for the graduates of colleges and schools of higher standing, a privilege to serve only one year as volunteers, instead of the regular three years' service, is granted, and it is expected to make of them reserve officers for the National Army, who, in time of peace pursuing their own business, may take arms in case of emergency to command reserves and citizens.

In the last Chinese war some of these reserve officers were summoned and actually went to the front. It was then proved that they were as useful and efficient as the military authority expected them to be.

It is interesting to notice in this connection that among higher commercial schools the Higher Commercial College of Tokio is the only institution that teaches Gymnastics as a compulsory subject. The Handelsschule at Frankfurt-am-Main, the Handels-Akademie mit Kaufmännischer Fortbildungsschule at Linz, in Austria-Hungary, the Commercial and Industrial School of Haarlem, in Holland, etc., have also Gymnastics in their schedules of subjects; but these institutions are of lower footing and of entirely different nature from what we here call higher commercial schools.

II.—THE PRINCIPAL COURSE—THREE YEARS.

The subjects of study in the Principal Course of the Higher Commercial College of Tokio are as follows:—

	1st Year.	2nd Year.	3rd Year.
a. Commercial Correspondence - - -	2	1	—
b. Commercial Arithmetic - - -	2	2	—
c. Book-keeping - - -	3	2	—
d. English - - -	6	6	6
e. Mechanical Engineering - - -	1	—	—
f. Commercial Products - - -	2	2	—
g. Commercial and Industrial Geography -	2	3	—
h. Commercial and Industrial History -	—	—	4
i. Political Economy - - -	2	2	—
j. Public Finance - - -	—	—	3
k. Statistics - - -	—	—	1
l. Civil Law - - -	3	2	—
m. Commercial Law - - -	—	—	4
n. International Law - - -	—	—	1
o. Science of Commerce - - -	3	6	—
p. Practice of Commerce - - -	—	—	8
q. French, German, Chinese, Korean, Russian, Italian, or Spanish - - -	3	3	3
r. Gymnastics - - -	3	3	1
Total number of hours per week -	32	32	31

Among these the following five subjects require a little explanation :—

1.—*Book-keeping.*

Different methods of Book-keeping of factories, banks, shipping and insurance companies, railway companies, sole traders and partnerships, factors and brokers engaged in different branches of business, are scientifically dealt with; and entries both in English and in Japanese are taught.

This subject, together with Commercial Arithmetic, gives students a very good training in the calculation of figures, which is essential for business men, whatever position they may occupy.

It is very strange to find that the majority of educated people all over the world, even those who are supposed to be conversant with commercial education, not only do not lay much stress on Book-keeping, but fail to understand its real importance.

A professor of a well-known university in America, when I asked him why the institute does not teach Book-keeping as a separate subject, remarked :—

“Well, perhaps Book-keeping may be necessary, but the object of this institution is to educate “Bosses” of businesses, not clerks or book-keepers.”

I have never heard such an absurd remark as that from the mouth of a commercial educationist. What greater mistake can he make than to say that Book-keeping is useful for clerks only and not for “Bosses”? Without the knowledge of Book-keeping, how can a man see the standing of his business? How can he check entries made by his clerks? How can he become an auditor of a business concern? A dishonest book-keeper under such an employer can embezzle any sum of money without being detected by him.

2.—*Mechanical Engineering.*

The usefulness of this branch of knowledge for business men rests upon the ground that, under the factory system of manufacture, as contrasted with the domestic system of production, the greater part of the objects of commerce are made by machinery, and consequently a fair knowledge of the mechanical processes of manufacture is necessary.

Among European Commercial Schools we find the *Ecole Supérieure de Commerce* in Paris, the *Ecole des Hautes Etudes Commerciales* in Paris, and the *Oeffentliche Handelslehranstalt* in Leipzig, teaching this course under the name of either technology, or mechanics, or mechanical technology.

3.—*Commercial Products.*

Under this category mineral, agricultural, forest, industrial, as well as marine products, are treated with reference to the amount of production, uses, occurrence, physical and chemical properties, mode of manufacture, falsification and valuation, and packing.

4.—*Science of Commerce.*

By science of commerce is meant a systematic study of principles and usages of all branches of trade, buying and selling of different commodities, mercantile agency, shipping, railways, insurance, warehousing, banking and speculation.

5.—*Practice of Commerce.*

The object of this subject is to teach the students how to apply to practical business what they have already learnt under various other subjects.

It will not be useless to explain here how this course is pursued.

It is divided into two distinct departments—Domestic and Foreign.

In the Domestic Department the students are led into the Practical Room, where they are required to organise and establish themselves in turn, in various kinds of business, in important cities and ports. Various parts of the room are allotted to the different kinds of business—for instance, one finds a banking establishment in one corner, a shipping agency in another, and an insurance office in another. A side room is called the custom house, and one sees large volumes of imports and exports entering and emerging from it, with clerks running to and fro preparing bills of lading, others drawing bills of exchange and selling them to the brokers, and so on, just as in actual business life. The *modus operandi* of this department has been copied from American Business Colleges.

This method of practical training for actual business, it is alleged, does not answer its purpose satisfactorily, inasmuch as there is the tendency to reduce the class-room into a sort of playground, and the students, being left alone to do as they please cannot get much benefit out of it. It is not unusual to hear severe criticisms as to the efficiency of the system wherever commercial schools which adopted it are found. But to the writer the fault, if any, does not seem to rest upon the system itself. It is its working that is open to criticism. If a sufficient number of competent tutors attend the class-room, so that they can watch and check the doings of the students, then there can be no reason why the system should not be successfully workable. To attain the desired object, it is imperative that the tutors in charge should map out a programme containing all kinds of transactions which may possibly occur in actual business, and strictly adhere to the rule that no student engaged in one department of business is allowed to take up the work of another department without going through all transactions arranged for the former in the programme.

In the Foreign Department the system followed differs from that of the Domestic Department, and has been borrowed from Belgium, the students being required to engage together in one

business at the same time. Important articles of import and export, and the various processes undergone by them on their way from the producer to the consumer, are taken up separately and gone through in the class-room, and thus the students are incidentally made to engage in various lines of business—such as shipping, insurance, and banking. The various forms of ordinary trading, such as local sales, imports and exports on own account and on commission, consignments, indents, agencies, etc., are introduced by means of fictitious operations, the leading data of which are actually based upon the most recent transactions of large firms. Special attention is paid to standing-in account calculations, forward exchange contracts, English commercial correspondence, cable codes, etc.

It is interesting, in this connection, to note that the American business schools do not teach anything beyond book-keeping, stenography, typewriting, and the mode of transactions of their domestic trade. It appears that they do not even dream of foreign commerce and other important branches of trade, such as insurance, shipping, etc.

In 1898 I was in a city on the bank of the Hudson, New York State, and attended a well-known business college there for a couple of months with the purpose of inspecting the *modus operandi* of the institution. Notwithstanding the fact that this college is by far the best business school in the United States and is well known throughout the country, the subjects taught are Book-keeping, Business Practice (domestic), Stenography, and Typewriting, and nothing else. What struck me most while I was staying there, was the fact that the professor who was taking charge of Business Practice, which is the most important subject in that institution, was utterly ignorant about Railways, Shipping, and Insurance. Not only could he not explain the meaning of such common business terms as "f.o.b.," "c.i.f.," "c.f.," "in bond," "on rail," "ex quay," "free alongside," "under the ship's tackle," etc., except the only term "c.o.d.," of which even a little girl of ten is well aware, but unfortunately he did not know what are meant by "general and particular averages," to say nothing about complicated clauses and phraseology of Insurance Policies, Charter Parties, and Bills of Lading. Yet that professor has taught Business Practice for 15 years, and has been one of the prominent Sunday School Teachers in that city all the time !

III.—THE PROFESSIONAL DEPARTMENT—TWO YEARS.

Now we come to the highest course in the Higher Commercial College of Tokio, viz., The Professional Department.

The department is established for the benefit of such graduates of the Principal Course of the College as are desirous of pursuing their studies further in one particular branch or to engage in the Consular Service.

The courses of study are as follows :—

- (a.) Economics.
- (b.) Economic History and Geography.
- (c.) Civil Law.
- (d.) Commercial Law and Marine Law.
- (e.) Public International Law.
- (f.) Private International Law.
- (g.) Constitutional Law and Administrative Law.
- (h.) English Diplomatic, Consular, and Commercial Phraseology.
- (i.) French, German, Russian, Italian, Spanish, Chinese, or Korean.
- (j.) Foreign and Domestic Commercial Usages, Banking, Railways, Shipping, or Insurance.

The courses of study in this department have proved themselves to be very useful, especially for those who applied for the Consular Examination. Out of six successful candidates for the Consular Examination last year, four were graduates of this department, the remaining two of the College of Political Science of the Imperial University of Tokio.

Before finishing the description of the Higher Commercial College of Tokio, it will not be superfluous to give a brief account of the Commercial Museum, the English Speaking Society, and the Boat Club connected with the College.

In a large upper room of one of the main buildings of the College is a well-appointed commercial museum, where there are on view rows of cases containing specimens of market commodities, both Japanese and foreign. To each article is attached a ticket showing the place of origin and the supposed market price. The museum has recently been thrown open to the public.

The Higher Commercial College English Speaking Society aims at cultivating English, and once a year speeches, recitations, and the like are made in English in the spacious lecture hall to a large audience of friends of the institution.

The regatta of the Higher Commercial College Boat Club, held every spring on the upper stream of the Sumida, is one of the sights of Tokio. Besides numerous races among college crews, a race between the crews of the Japan Mail Steamship Company, the Bank of Japan, the 119th Bank, and Mitsui and Bros. afford the people of Tokio great interest and excitement.

Thus far I have explained, though roughly, the essence of the programme of the Higher Commercial College of Tokio. Now it remains for me to touch upon a few points which would assist to give the reader a clearer comprehension of the subject.

The conglomerate character of the programme is sometimes criticised as only productive of jacks of all trades, and in such games one cannot cultivate the essentials of actual business. But such an attack can easily be answered by saying that in business life a sound common sense is more important than anything else, and that to educate young people for the complicated business world of to-day, the policy should be to

business at the same time. Important matters concerning export, and the various processes under the most abstract academic way from the producer to the consumer, the real art of book-keeping and gone through in the class-room, reasonings. Moreover, the Commercial College, though incidentally made to engage in subjects can hardly be said to be too as shipping, insurance, and other subjects can be dealt with under ordinary trading, such as executing parts of them, or can be account and on commercial heading—as, for instance, Speculation etc., are introduced. Selling, Warehousing under Customs, leading data of Shipping under Transportation, etc.—transactions of in account over six years for the whole course is long in account a dozen different subjects of studies.

It is in municipal commercial schools, whose footing is lower and business extends over only two or three years, such subjects as Political Economy, Statistics, Public Finance, International Law, the second Foreign Language, etc., are not taught. Their object, as has been said before, being to meet local needs, these schools rightly lay greater stress on elementary and practical subjects—such as Arithmetic, Book-keeping, Commercial Law, etc.

There is a pestilent and widespread belief among the business men of Japan (I think it is also the case in other countries) that the graduates of commercial schools are no better qualified for actual business than those who have been brought up as apprentices in business houses, and hence commercial schools are useless things. The existence of a great number of people who harbour such an absurd idea in this day, in spite of School Boards and the march of intellect, is something unintelligible. To say that the young men fresh from commercial schools cannot compete with the apprentices of a business concern in drawing Bills of Parcel or in counting figures in the Ledger is tantamount to assert that as Dr. Linguist, who studied different languages at the Imperial University, cannot speak English as quickly as those vile interpreters of Yokohama, who picked up the knowledge of English at *Hatoba*, his Alma-Mater is good for nothing.

In conclusion, what I want to emphasise is that, thanks to the enterprising spirit of her people, and through her good system of commercial education, Japan has developed her foreign trade to a considerable extent within the last ten years, and pushed herself forward into the world's markets, instead of always taking a passive attitude like China and other Eastern nations. Although Japanese commerce is yet in an infant stage as compared with that of the first-class European countries, it can safely be demonstrated that in time to come it will assume a fair percentage of the international trade of the world. It is beyond dispute that, unless with the foresight and the wise measures taken by the Department of Education for diffusing commercial and technical education, the commerce of Japan could not have made the present progress.

fact that the Japanese Government is exceedingly keen in
ing the commercial welfare of the country through educa-
be proved by another plan recently taken up by the
ent of Agriculture and Commerce. The excellent example
by some European nations of sending young men to
foreign firms as apprentices has been followed by Japan.
The Department of Agriculture and Commerce has
about a dozen young men to different countries to
ous branches of trade and industry. These young men
been selected mostly out of the graduates of municipal com-
mercial schools and are partly supported by the Central Govern-
ment, with the special fund appropriated for the purpose.

As to the question how far commercial education can contribute
to the development of a nation's commerce, I am not able to give
any information from the Japanese experience, except that it has
assisted to a great extent the expansion of Japan's trade and
industry. The growth and development of the economic well-being
of the people cannot be ascribed to one or two causes only. In
a dynamic society, undergoing changes and evolution, innumera-
ble direct and indirect causes combine to produce one effect.
To enumerate all the causes, and to weigh their comparative
merits, is almost beyond our reach. But if trade be the war of
peace, the training and equipment of efficient soldiers for it must
be of vital importance to any commercial nation; and, if it is
true that the army trained by modern scientific principles is
stronger than those trained under old fighting methods, it will
also be true that the business men educated in well-organised
commercial schools are, other things being equal, better qualified
for modern commercial warfare than those who were brought
up under the old-fashioned apprentice system.

Finally, as regards the system of commercial education and
the subjects to be taught in commercial schools, Japan, although
she deserves the highest reputation, can by no means claim that
her methods are the best for all countries. It is the question of
expediency which must be decided according to the needs and
characteristics of respective countries. What has been presented
to you here, therefore, does not mean anything more than the
presentation of the most expedient system of commercial educa-
tion for a small group of islands in the Far East, whose modern
institutions have, for the most part, been introduced from
advanced countries of Europe and America, and are as yet far
from being perfect.

ZENSAKU SANC.

London, Feb., 1900.



THE
STUDY OF ARITHMETIC
IN
ELEMENTARY SCHOOLS.

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THE STUDY OF ARITHMETIC IN ELEMENTARY SCHOOLS.

“If Arithmetic were taught properly to children, it would be one of the most valuable instruments for cultivating their faculties, for elucidating the perplexities which surround them in a strange world, and for rescuing them from the delusions of the senses.”—The Rev. F. D. MAURICE.

SECTION 1.—INTRODUCTORY.

It is not an accidental coincidence that civilised nations have in all times attached great, and occasionally even superstitious, value to the Study of Numbers, and in all Christian communities the three subjects of Reading, Writing, and Arithmetic (our three R's) are regarded as the primary and indispensable branches of Elementary Education. We may well ask, why that is so. About Reading and its correlative, Writing, the answer is obvious, but why give to the study of numbers such a prominent place in our school curricula? The rejoinder that skill in handling numbers is useful, and indeed necessary, in all the walks of life is no real answer, for if our bulky school arithmetics were restricted to only as much of the study as is required for the affairs of life, those formidable volumes would shrivel up into very diminutive dimensions. How many millions of us do not pass through life, none the worse, for never having heard of, or having wholly forgotten G.C.M. or L.C.M.? What need has a tradesman, or a merchant, a housewife, or a statesman of elaborate notions of proportion, of the properties of recurring decimals, of involution or evolution? What, then, it might be asked, is the use of the greater part of our Arithmetical Studies? It is to be feared that as a direct preparation for business their value is very subordinate. The arithmetic that is wanted in any special business is best learnt in that business. It cannot even be maintained that mathematical problems are apt illustrations of the problems that present themselves in the affairs of life. The mathematician deals with certainties, and all his data are supplied him, but the man of affairs has to deal with probabilities;* he has to collect his data, and is never sure that he has collected them all, nor that he has appraised them at their proper relative values. If to all this is further added that in the solution of practical problems a highly important rôle is played by the Personal Equation, which does not enter into mathematical problems at all, then the difference between the two spheres of thought will be obvious to the most modest capacity. Once more then we ask: Why do we teach the more advanced stages of Arithmetic in our public and private Elementary Schools? Or, in other words: What mental or moral benefit do we hope to confer on our pupils by this study? The answer is: Admitting to the full the truth of all these allegations, yet there accrue other great advantages from the study of Arithmetic; it quickens the

* Moltke says: “In war we have to deal with probabilities, and the most probable is,” etc.

understanding by the clear perception and skilful handling of the data of the problems propounded; it invigorates the character by inducing the learner to grapple with difficulties till they are surmounted; it stimulates the love of thought by the exhilarating sense of victories achieved, and makes the student acquainted with his own mental powers, which, without such stimulus, might have remained dormant all through life.

This is the answer to our preliminary inquiry and also our plea for the rational study of Arithmetic; for if the Arithmetic taught in our Elementary Schools does not confer these several benefits; if, in a word, it fails to be a discipline, because it is taught mechanically, then it has lost its *raison d'être* and its value is a negative quantity: it deadens, instead of quickening the intelligence, and wastes time that might have been profitably spent to much better purpose. If a pupil taught to work by rule of thumb is subsequently introduced to a teacher who gives rational instruction, then the habits of thought already formed are found to be a hindrance to progress.

SECTION 2.—ON THREE METHODS OF TEACHING ARITHMETIC.

There are three methods of teaching Arithmetic, and indeed most other subjects:

a. The "expeditious" mechanical method, where the teacher begins at the point where he ought to leave off, viz., at the ultimate generalisation, misleadingly called the Rule.* Such a teacher troubles himself very little about the *rationale* of his processes; carefully does he avoid infecting his students with the "malady of thought," but prefers to load their mere portative memory with directions, formulæ, "straight tips," and the like: thus he secures dishonestly the much-coveted examination results, and palms off his cheap pinchbeck as valuable gold. It cannot be too clearly stated, nor too often repeated, that there are dishonest ways of getting knowledge as there are of getting money, but with this remarkable difference, that whilst the purchasing power of a sovereign is unaffected by the manner in which it has been acquired, knowledge dishonestly obtained has no regenerative force, confers no culture, and is often a negative quantity. This latter is the popular system, commonly known as Cram.

b. Teaching by Demonstration: here too the teacher begins at the wrong end, viz., at the "Rule," but gives cogent and irrefragable proof of its truth. This method, though a vast improvement on that of the crammer, is still far from the best, for it allows the pupil to remain in a merely receptive, passive attitude of mind, and consequently fails to call out the student's initiative, to enlist his co-operation, and to engender that self-reliance which flows from it and from the delightful sense of victories won. The reasoning powers certainly are cultivated, but still it is the memory which is principally relied upon. It is conceivable that a student may commit a whole volume of rules and proofs to memory, and yet when the rules are forgotten, as some day,

* Rules are *made* by man, but the truths of Mathematics are discovered, not made by man. It were well if the term "rule" could be expunged from our text-books

of course, they must be, what reward has he for all his efforts? Not even the love of study, or of mental exercise, for all his toil was weariness to him.

c. Teaching by Investigation, now at last known in England also, as the heuristic* method, where the teacher by skilful questioning leads the pupil in the path of discovery. This instruction is admitted by all our leading educationalists as the most formative (*bildend*, as the Germans call it), because knowledge is made a means to an end; as its acquisition is mainly due to the pupil's own efforts, the teacher restricting himself to seeing that the data of the problem are clearly apprehended by the pupil and guiding his steps in the search after truth in the discovery of which the pupil finds his highest reward. When the solution is found, the end of the lesson is attained, and there is no need, indeed it is not desirable, to commit the "Rule" thus discovered to memory, for, if forgotten, it can be rediscovered, and this rediscovery will grow easier and more rapid with every repetition; till at last the process is remembered by analysis and association. Such teaching can dispense with prizes and scholarships, and all other adventitious, unhealthy, and sometimes even immoral, incitements to work. This is no reflection on the noble founders of scholarships, but only on the abuses to which they have led.

SECTION 3.—EXAMPLES OF THE THREE METHODS.

An example or two of the three methods will make this clear.

First Illustration.

Let it be required to teach Multiplication of an integer by an integer, say: 58469 by 6037.

By CRAM.—Place the multiplier (6037) neatly under the multiplicand (58469) and draw a line underneath, thus:

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

Multiply the upper line first by 7, and write the first figure of this product (3) under the 7, (the number by which you multiply), thus: 58469

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

409283; next multiply by 3, and again write the first figure of the new product (7) under the 3 by which you multiply thus: 58469

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

175407; before proceeding similarly when you multiply by 6, do not omit to place an 0 under the 0 of the multiplier, thus: 58469

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

$$\begin{array}{r} 58469 \\ \underline{6037} \end{array}$$

352977353 and now draw a line and add up the

* *εὕρισκω* = I find.

three products. Learn by heart. Rule: To multiply one number by another number write the multiplier under the multiplicand; then multiply the multiplicand separately by each figure of the multiplier, taking care to place the first figure of each product under that figure of the multiplier by which you multiply; lastly, add up the several products.

By DEMONSTRATION.—The teacher by this method proceeds much in the same way as the crammer has done, but he adds: the reason for this process is readily understood, for when we multiply by the 3 we really multiply by 30, and we ought to have added a cipher, which would fill up the empty space under the 3 of the previous line, and similarly, when we multiply by the 6, we really multiply by 6000, and we ought to have added three ciphers, which would fill up the three empty places of the third line; in full, therefore, the working would look thus:

$$\begin{array}{r}
 58469 \\
 6037 \\
 \hline
 409283 \\
 1754070 \\
 350814000 \\
 \hline
 \end{array}$$

352977353, but the scored out ciphers, being superfluous, are omitted. Hence, learnt by heart: Rule, &c., as above.

By INVESTIGATION, or by the "heuristic" method.

(The pupils are supposed to have already discovered the process of multiplication by a single digit, by powers of ten, and by multiples of these powers.

Notice that the crammer and the teacher by demonstration commonly plunge *in medias res*. The teacher on the heuristic method approaches his problem by easy stages.

Teacher: It is required to multiply 58469 by 6037. What does that mean?

Pupils: It means that 58469 is to be taken 6037 times.

T. Might I write this number down 6037 times and then proceed to add it up?

P. (laughing). That would be much too long and troublesome.

T. What else can you suggest?

P. No answer.

T. Could not we take the number 58469 one thousand times with great ease?

P. Yes, by adding three ciphers.

T. How? You, James, come to the black-board and do it. (James writes 58469000.)

T. Good: now could we turn this 1000 times into 6000 times?

P. Yes, by multiplying 58469000 by 6.

T. Do it. (James writes 350814000, and, being bidden, not runs to his desk.)
from ou.

T. We have now found the product for 6000 times; is that all we want?

P. No; we want the number 58469, 37 more times.

T. How shall we find that?

P. First find for 30 times, and then for 7 times.

T. Somebody come forward and do it; you, Fred. (Fred writes $58469 \times 30 = 1754070$; and, at the teacher's suggestion, in another part of the board, $58469 \times 7 = 409283$, all the while working aloud in some such wording as: 63' carry 6; 42, 48' carry 4; 28, 32' carry 3; 56, 59' carry 5, 35, 40'.)

T. We have now three products on the board—viz., 350814000, which is 6000 times the multiplicand; 1754070, which is 30 times, and 409283, which is seven times the multiplicand; how shall we find the answer for 6037 times?

P. By adding the three lines——

T. (interrupts) Call them "products."

P. By adding the three products together.

T. Harry, will you come out and do it?

Harry works: 58469×6037

350814000

1754070

409283

352977353

T. That is right. Shall we try another problem? Who will come out and work one? (Several hands are eagerly held up, and the teacher selecting John dictates): Seventy-five thousand eight hundred and ninety-seven is to be multiplied by five thousand seven hundred and two.

J. writes 75897×5702 , and works aloud:

379485000

53127900

151794

432764694

T. (questions) This first product is how many times the multiplicand?

P. 5000 time.

T. And the second product?

P. 700 times.

T. And the third product?

P. Twice the multiplicand.

T. And all the three products together?

P. 5702 times the multiplicand.

T. That is what we were required to do.

Now the whole class have some problems given them to work in their ciphering books. At a later stage the teacher points

out that the terminal ciphers might be omitted, and by actual trials shows that the products might have been worked in any order we pleased. This proves very advantageous when, at a more advanced stage "contracted operations" are taken in hand.

Second Illustration.

It is required to reduce $\frac{23}{32}$ to a decimal fraction.

By CRAM.—Divide 23 by 32, thus: 32 in 23 | 32) 230 (.71875
is not contained, add 0 to 23, making 230, 32 | 60
in 230, 7 times, mark 7 in the quotient (and | 280
don't neglect placing a point, called the decimal | 240
point, before this 7), remainder 6; add 0, 32 | 160
in 60, 1, remainder 28; add 0, 32 in 280, 8, |
remainder 24; add 0, 32 in 240, 7, remainder 16; add 0, 32 in
160, 5, no remainder. Therefore $\frac{23}{32} = .71875$. Learn by heart.
Rule: To reduce a vulgar fraction to a decimal divide the
numerator by the denominator, add ciphers to the successive
remainders till there is no remainder—the quotient is the
decimal fraction required.

By DEMONSTRATION.—To the crammer's work this teacher
adds: We know that if the terms of a fraction are both
multiplied or divided by the same number the value of the
fraction remains unaltered; now:— $\frac{23}{32} = \frac{2300000}{3200000}$ (both terms be-
ing multiplied by 100,000) = $\frac{2300000 \div 32}{3200000 \div 32} = \frac{71875}{100000}$ hence, Rule &c.,
as above.

$$\begin{array}{r} 32) 2300000 (71875 \\ 60 \\ 280 \\ 240 \\ 160 \\ \hline \end{array}$$

By INVESTIGATION, or by the heuristic method.

(The pupils have already been led in previous lessons to discover the utility of fractions whose denominators are powers of ten, and we imagine that we are handling peculiar units that split up readily into 10 equal parts or 10 tenths; each tenth again into 10 equal parts, or 10 hundredths; each hundredth into 10 thousandths, and so on.)

We now approach our problem by easy stages, thus:—

$$\frac{1}{2} = \frac{1}{2} \text{ of } \frac{1}{10} = \frac{5}{10}.$$

$\frac{1}{2}$ is the vulgar fraction, whose equivalent decimal fraction is $\frac{5}{10}$;
if $\frac{5}{10}$ is reduced to lowest terms we recover the original
fraction $\frac{1}{2}$.

Third Illustration.

It is required to find $\frac{2}{3} \times \frac{5}{7}$.

By CRAM.—Rule: Multiply the two numerators together for the new numerator, and the two denominators for the new denominator, $\frac{2}{3} \times \frac{5}{7} = \frac{2 \times 5}{3 \times 7} = \frac{10}{21}$. Answer.

By DEMONSTRATION.— $\frac{2}{3} \times \frac{5}{7} = \frac{2}{3} \times (5 \times \frac{1}{7}) = (\frac{2}{3} \times 5) \times \frac{1}{7} = \frac{10}{3} \times \frac{1}{7}$
 $= \frac{10}{3} \div 7 = \frac{10}{3 \times 7} = \frac{10}{21} = \frac{2 \times 5}{3 \times 7}$. Q.E.D.

By INVESTIGATION, or by the heuristic method.—Teacher: It is required to multiply $\frac{2}{3}$ by $\frac{5}{7}$; what does that mean?

Pupils: Take $\frac{2}{3}$, $\frac{5}{7}$ of a time.

T. $\frac{5}{7}$ of a time? Has part of a time any meaning? Can you say you have seen the King half a time?

P. (laughing). No; part of a time has no meaning.

T. Never?

P. No, never.

T. Is it sense to talk of a wheel having turned round 3 times?

P. Yes, it has made 3 turns.

T. What if I say, the wheel has turned round half a time, has that an intelligible meaning?

P. Yes, the wheel has made half a turn.

T. May it mean something else as well?

P. (after some hesitation). No; (and some add) certainly not.

T. Then shall we say that the wheel has turned half a time has one meaning, and only one meaning, viz., that it has made half a turn, or half a revolution? Would you say then that part of a time is always nonsense?

P. Not always, but sometimes.

T. Let us now return to our problem:— $\frac{2}{3} \times \frac{5}{7}$. Suppose a wheel has a circumference of $\frac{2}{3}$ of 1 yard. How far has it travelled after it has made one revolution?

P. $\frac{2}{3}$ of 1 yard.

T. If it has made $\frac{5}{7}$ of one revolution?

P. $\frac{5}{7}$ of $\frac{2}{3}$ of 1 yard.

T. Well, what part of 1 yard is that?

P. (No answer.)

Look at this line:



T. Suppose A B to represent a yard, what would A C be?

$\frac{1}{3}$ of a yard, a foot.

Let us say $\frac{1}{4}$ of 1 yard. What would A D represent?

$\frac{1}{4}$ of 1 yard

T. Good. What would you call A E?

P. No answer.

T. Let us count the number of parts into which it is divided ;

P. (count) 1 7.

T. What then would you call A E?

P. $\frac{1}{7}$ of $\frac{1}{3}$.

T. How many such bits can you get out of the whole line A B?

P. 21 such bits.

T. How?

P. From A to C, 7 bits; from C to D, 7 bits; and from D to B again 7 bits; in all 21 bits.

T. How much then is $\frac{1}{7}$ of $\frac{1}{3}$ of 1 yard?

P. $\frac{1}{21}$ of 1 yard.

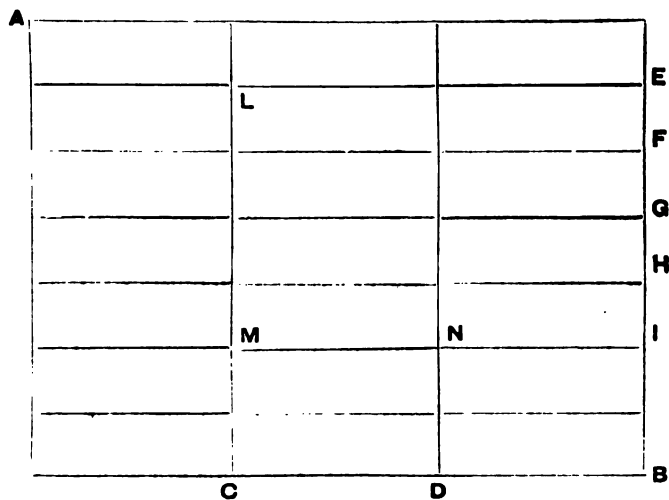
T. $\frac{1}{7}$ of $\frac{2}{3}$ of 1 yard?

P. $\frac{2}{21}$ of 1 yard.

T. $\frac{2}{7}$ of $\frac{2}{3}$ of 1 yard?

P. $\frac{4}{21}$ of 1 yard.

T. We shall see this more c'arly, if we take $\frac{2}{7}$ of $\frac{2}{3}$ of a surface.



From a diagram such as the above the teacher can readily elicit from the pupils, that $AC = \frac{1}{3}$ of the whole surface, $AD = \frac{2}{3}$ of ditto, $AE = \frac{1}{7}$, $AF = \frac{2}{7}$, $AG = \frac{3}{7}$, $AH = \frac{4}{7}$, $AI = \frac{5}{7}$ of ditto.

$AL = \frac{1}{7}$ of AE , $\therefore \frac{1}{7}$ of $\frac{1}{7} = \frac{1}{49}$ of 1 whole } $\therefore \frac{1}{7}$ of $\frac{1}{7} = \frac{1}{49}$ of 1
also $AL = \frac{1}{7}$ of AC , $\therefore \frac{1}{7}$ of $\frac{1}{3} = \frac{1}{21}$ of 1 „ }

Again $AM = \frac{2}{7}$ of $AE = \frac{2}{7}$ of $\frac{1}{7} = 2 \times \frac{1}{49} = \frac{2}{49}$ } $\therefore \frac{2}{7}$ of $\frac{1}{7} = \frac{2}{49}$ of 1
also $AM = \frac{2}{7}$ of $AC = \frac{2}{7}$ of $\frac{1}{3} = 2 \times \frac{1}{21} = \frac{2}{21}$ }

Again $AN = \frac{3}{7}$ of $AE = \frac{3}{7}$ of $\frac{1}{7} = 3 \times \frac{1}{49} = \frac{3}{49}$ }
also $AN = \frac{3}{7}$ of $AC = \frac{3}{7}$ of $\frac{1}{3} = 3 \times \frac{1}{21} = \frac{3}{21}$ }

$\therefore \frac{3}{7}$ of $\frac{1}{7} = \frac{3}{49}$ of 1 = $\frac{1}{14}$.

To summarise :

$$\begin{aligned}\frac{1}{3} \text{ of } \frac{1}{7} &= \frac{1}{21}, \\ \frac{2}{3} \text{ of } \frac{1}{7} &= \frac{2}{21}, \\ \frac{2}{3} \text{ of } \frac{2}{7} &= \frac{4}{21}.\end{aligned}$$

After a number of problems have been thus reasoned out, the "ultimate generalisation" is arrived at by sheer reiteration and rapidity of thought.

T. We have not yet done with this piece of work; have we not been guilty of great carelessness? We worked $\frac{2}{3}$ of $\frac{2}{7}$ and we were asked to work $\frac{2}{3} \times \frac{2}{7}$. Is $\times =$ of?

P. (bewildered and perplexed). No; division is "of."

T. Are you sure?

P. Yes, surely; if you divide any number by 2, you take the half of that number.

T. To divide (say 18) by 2 means take $\frac{1}{2}$ of 18, not 2 of 18; you see then that $18 \div 2 = \frac{1}{2}$ of 18,

$18 \div 3 = \frac{1}{3}$ of 18 and so on, and you can only substitute "of" for \div if you change 2 into $\frac{1}{2}$, 3 into $\frac{1}{3}$, 9 into $\frac{1}{9}$, and so on; but to take 2 of $18 = 2 \times 18$; were we right then in substituting "of" for \times ?

P. (One pupil's voice): To take 2 of 18 leaves 16.

T. Do you all agree to that?

P. (Some voices): Yes; yes, certainly; I think so.

T. Let me take some sevens, say 6 sevens:

.
: : : : :
: : : : :
: : : : :
:

How many of these sevens have I now taken?

P. Four of the sevens.

T. How many more of these sevens do I still want?

P. Two more of the sevens.

T. Good. How many units are there in 4 of these sevens?

P. 28 units.

T. And in 6 of the sevens?

P. 42 units.

T. Is it right then to say, that 6 of sevens $= 6 \times 7$? and 2 of 18 $= 2 \times 18$.

P. It seems so, but it is very strange.

T. The whole difficulty lies in the various ways we use the little word "of"; we ought to express $18 - 2$ as 2 off 18, but 2 of $18 = 2 \times 18$. It will appear less strange to you, when you think it over several times, but I have another difficulty. Which is more, $\frac{2}{3}$ or $\frac{2}{3} \times \frac{2}{7}$? (Look at our diagram.)

P. $\frac{2}{3}$ is more than $\frac{2}{3} \times \frac{2}{7}$.

T. Then does multiplication make less? Is not that contrary to all we have learnt hitherto?

P. Yes, of course. (One hand is held up.)

T. What have you to say, Fred? *

Fred. There is no increase if you multiply by 1.

T. I am very pleased, Fred, with this answer. Now take any number, say 18.

$$18 \times 5 = 90$$

$$18 \times 4 = 72$$

$$18 \times 3 = 54$$

$$18 \times 2 = 36$$

$$18 \times 1 = 18$$

$$18 \times \frac{1}{2} = 9$$

$$18 \times \frac{1}{3} = 6 \text{ and so on.}$$

Thus we see that as the multiplier grows less, so the product approaches the multiplicand, when the multiplier is unity the product = the multiplicand, and when the multiplier is less than unity then the product is less than the multiplicand.†

COMMENT.—This last illustration clearly shows how very expeditious and easy for the teacher cram is, how lengthy and laborious heuristic teaching is; but on the other hand, how little is learnt by the former method, how much is gained, what habits of accurate thought are formed and what amount of mental activity is called into play, by the heuristic method, which enlists the intelligent co-operation of the pupils.

The experienced teacher will moreover see that by thus teaching $\times \frac{a}{b}$, the ground has been prepared for $\div \frac{a}{b}$.

SECTION 4.—ON VISUALISATION.

In the last lesson the teacher employed a diagram to give clearness and precision to his teaching; in fact some sense-impression should, wherever possible, form the starting-point of the lesson to be given, for this alone brings the data of the problem in sharp outlines before the pupil. Of all the avenues that lead to the brain that of the eye is the most frequented and most helpful to thought.

Segnius irritant animos demissa per aures
Quam quae sunt oculis subjecta fidelibus, et quae
Ipse sibi tradit spectator.—HORACE.

And Goethe says:

Wenn ich sehe dann denke ich,
Wenn ich denke dann sehe ich.

Both these poets, it is true, apply their maxim to art, but it is equally applicable to the art of teaching.

Thinking and Seeing must go together, for vision aids thought, and thought guides and corrects vision, and no good elementary teacher will rest satisfied with his work till he has made his subject matter evident to his pupils' senses. The best visualisation of the numerical magnitudes of our decimal system of

* This has actually occurred.

† Pupils who know a little Latin might have pointed out to them, that words often drift away from their original meanings; thus "pen" is no longer a feather or a quill, but a writing tool.

notation is furnished by the metric units, for they exhibit the powers of ten both actually and relatively, and a skilful teacher can by means of them illustrate: (a) the component parts of the powers of ten, *e.g.*, $100 = 2 \times 50 = 4 \times 25 = 5 \times 20 = 10 \times 10$, (b) prime and composite numbers, (c) the products of the multiplication-table, (d) Numeration and Notation, (e) the four "cardinal rules," (f) decimal fractions, both terminating and recurring, (g) percentages inclusive of discount, interest, &c., and (h) extraction of square root. To render visible the operations with £ s. d., Messrs. Philip and Son, of Fleet Street, have published imitation coins of pasteboard, which can be utilised in teaching addition, subtraction, and many operations of Commercial Arithmetic.

SECTION 5.—ON THE SEQUENCE OF LESSONS.

At the earliest stages the children should be well exercised in manipulating numbers mentally. Mental Arithmetic trains the powers of attention, of concentration, and of rapidity of thought; moreover, if the mechanical manipulation of numbers is fairly well mastered the drudgery of Arithmetic is overcome, and only the rationale of processes, which is always pleasurable, has to be dealt with; and, finally, skill in mental calculation comes in very usefully in the practical affairs of life. A good course of Mental Arithmetic should also teach how to utilise our admirable system of coinage in calculating dozens, scores, discount of 5 and $2\frac{1}{2}\%$, &c., &c.

The Written Arithmetic should also at the early stages be connected with practical business, because little problems, such as the calculation of small tradesmen's bills, giving change out of a shilling or £1 on payments of less amounts, evoke the children's interest, and are likely to enlist the parents' sympathy with their school-work far more than if they have lengthy operations set them for home-work, which the parents criticise adversely because they cannot understand them.

When more complex problems, or operations with larger numbers are taken in hand, it is exceedingly difficult to prescribe a sequence of lessons, to be undeviatingly followed, because the order of lessons must be adapted to the average ability of the class, and perhaps even to local requirements.

It is nevertheless possible to lay down certain general principles, which must never be lost sight of:

- a. The difficulties must be graduated, so as to make the long ascent an easy gradient;
- b. In all cases advance must be made from the Particular to the General, and from the Concrete to the Abstract;
- c. Each new operation must flow from and find its *raison d'être* in one that has preceded it, for then we follow the genesis and growth of ideas in the learner's mind. For example, Subtraction should through Cumulative Subtraction (in which children are always greatly interested) lead to Division in both

its meanings; Short Division to early notions of Vulgar Fractions and at suitable stages decimal fractions should be interwoven with vulgar fractions and so on; from this follows

d. that no good teacher will follow the order of the text book, for this proceeds logically, but the teacher must proceed psychologically. For example, the text book teaches G.C.M. and L.C.M., the rationale and use of which are difficult to understand early under Integral Arithmetic, but the wise teacher postpones these subjects till the need of them is felt in teaching

$$\frac{ma}{mb} = \frac{a}{b}, \text{ and } \frac{a}{b} \pm \frac{c}{d} = \frac{ad \pm bc}{bd}, \text{ finally.}$$

e. The examples to be worked by the pupils should not only illustrate the subject matter taught, but some of them should be preparatory for future work; thus in addition some problems should consist of addenda of like amount to suggest multiplication; in the lessons on vulgar fractions some problems might advantageously be set with fractions whose denominators are powers of 10 and so on.

SECTION 6.—ON THE FORMATION OF HABITS OF ACCURACY.

A good Arithmetician may from habits of inaccuracy be an unreliable Computer, and as such habits, when once contracted, are hard to eradicate, it is incumbent on the teacher early to attend to the formation of habits of accuracy, and to cultivate them right through the whole course of arithmetical studies. Among the means to be adopted the following may be recommended:

a. Great neatness of work both in the shape and distinctness of the figures and in their orderly arrangement;

b. Absolute mastery of the Addition, Multiplication, and Shilling and Pence tables, so as to secure

c. Great rapidity of work, the mind of the slow computer being apt to wander;

d. The adoption of regular, concise, and rhythmic wording in actual working (see p. 575);

e. Rapid and continuous mental application of tests of accuracy, such as casting out nines and elevens, etc.;

f. When errors are detected, the computer ought to watch what particular mistakes he is prone to commit and strive to avoid them.

SECTION 7.—ON HOME-WORK.

Home-work carefully selected both with respect to quantity and quality is highly advantageous to the pupils and interesting to their parents, but must of necessity largely increase the teacher's labours.

The pupil is kept out of harm's way by having his leisure time

profitably employed, and by being compelled to work independently gains in self-reliance, a valuable factor in the formation of his character.

The parents' interest in the child's work being roused, the chances are that they will be inclined to cooperate with the school authorities in enforcing regularity and punctuality of attendance and will more readily reconcile themselves to the loss of the child's earnings during the school-years. The teacher, no doubt, will feel that the correction of these exercises adds enormously to his labours, which are arduous and responsible enough; but the school-authorities must take that into consideration, and afford him relief in some other directions, such as reduction of the size of classes and diminution of his multifarious clerk-work. The increase of expenditure entailed thereby is amply made good by the greater efficiency of the school.

The pupil's work at home, or at school, might be done on slates, on loose sheets, or in stitched exercise-books. We will examine the advantages and inconveniences of each.

The Use of the Slate is economical, but in every other way most undesirable. The repulsive habits that so often accompany slate work may be discountenanced and repressed, but the grey pencil-marks on the grey surface are injurious to the eyesight, and the danger that the spread of education tends to do harm to the eyes of the children is real and should be carefully guarded against.

Work on loose sheets of white (not blue) paper with dark pencil for younger children, and with very black ink for the older pupils, obviates this disadvantage, but it shares with slate-work the grave drawback that the pupil, by being accustomed to destroy his work, contracts habits of carelessness and untidiness, and loses the opportunity of comparing the results of previous labours with those of the present time. No better nor more legitimate stimulus for continued exertion can be found than a gratifying sense of progress made; for these reasons

Work in stitched exercise books is to be preferred. Exercise and ciphering books honestly kept and carefully preserved are an excellent record and index of the work of the pupil, who can be taught to take pride in them and treasure them in later years as pleasant reminiscences of his school-life.

SECTION 8.—ON THE CORRECTION OF EXERCISES.

It is certain that a careful correction of exercises adds greatly to the self-sacrificing labours of the teacher, but it is equally certain that without this self-sacrifice the teaching loses more than half of its efficiency. The problem before us is how to combine a minimum of sacrifice on the part of the teacher with a maximum of benefit to the taught.

If the teacher undertakes the great labour of making all the corrections himself, then the chances are that his young charges will merely give a hasty glance at the alterations made without

taking the pains to account for them, or they would perhaps ignore them altogether, and only look at the award at the end of the exercise, if any such is given;* this system would be a combination of a maximum of labour on the part of the teacher with a minimum of benefit to the pupil; the very reverse of what we are in trying to secure.

A noble-minded Catholic prelate, Vincent Eduard Milde, Prince-Archbishop of Vienna, who was as eminent as an educationalist as he was as a priest, made the following wise suggestion: "Man halte den Zögling an den Fehler selbst zu verbessern; denn nur dadurch wird der Fehler selbst ein Bildungsmittel für den Zögling." (Lead the pupil himself to correct his errors; for thus only does the error itself become a means of culture to the pupil.)

In obedience to this maxim the teacher should by means of well-understood symbols merely indicate the place and nature of the error, and then return the exercise to the pupil, who should make his own corrections either in a wide margin specially reserved for that purpose, or better still on the left-hand page, the pupil's original work being confined to the right-hand page. Then these corrections are once more submitted to the teacher and if necessary discussed with the pupil.

This system reduces the teacher's labour and combines with the benefits of class teaching the far greater advantages of individual instruction, for the pupil will find it impossible to slur over or extenuate his negligence, and at the same time if by a not uncommon and hardly avoidable accident some premature knowledge has been expected of the pupil the teacher has the opportunity of rectifying the slip.

It should be insisted on that the pupil should work straight into his ciphering book and not waste time with neat transcription, nor should erasures be allowed, but errors should be neatly scored out with a ruler. If all the pupil's work is recorded, the teacher can trace his chain of reasoning and the source of error and deal with it, and moreover habits of neatness thus enforced are a prime requisite to the formation of habits of caution and accuracy. To secure this, ciphering books should be ruled in chequers on the right-hand page—if the left-hand, the correction, page is ruled in simple straight lines the pupil is gradually emancipated from the leading-string of the cheques.

It is obvious that, *mutatis mutandis*, Milde's suggestion is equally applicable and advantageous to other branches of study.

A. SONNENSCHNEID.

* If awards are given they should be determined on principles clearly understood by both teacher and pupils.



A SUGGESTION AS REGARDS LANGUAGES IN SECONDARY DAY SCHOOLS.

During the last twenty years there has sprung up a new type of school, providing, one might almost say, for a new type of scholar, and those who have had to guide the destinies of these schools have been face to face with the difficult problem as to what share of the Time-Table should be allotted to the various languages. A variety of circumstances have influenced the decisions arrived at in the different cases, but the experience of the writer is not in favour of the usually adopted compromise, and the present paper is an attempt to suggest a new solution of the problem.

At the outset I must state that I propose to consider the needs of that type of school, rapidly growing more and more common, which takes boys from 8 to 16—in a few rare instances to 17—though I think that the plan might possibly be applicable to such country grammar schools as have to do the work of several types, and to the modern sides of some of the larger schools. A number of schools are now worked under the regulations framed by the Department of Science and Art for "Schools of Science." My proposed time-table is obviously not suited to such schools, but the plan of beginning German early might be tried. It is clear that a boy under such a science system cannot take all the languages. The burden is already as great as can be carried. To such schools and to the great Classical Schools the suggestion is not applicable. An objection has been raised to the suggestion by an eminent authority on other grounds, viz., that it would be wiser to abolish Latin altogether and deal only with French and German. I am quite of the opinion that the modern languages would be much improved by such a plan, but the fact remains that in the schools we are considering *it is not possible to abolish Latin*. They all have to provide for boys who may require Latin for the entrance examination to the profession or business they propose to adopt. For example, no boy can become a solicitor, a chartered accountant, or a pharmaceutical chemist, unless he can show a slight knowledge of Latin. I say nothing as to the value of such Latin as is demanded. The fact remains that it is demanded, and it is absurd to say that these schools are not to prepare boys for such life-work as the above.

Though I am a firm believer in the value of a classical training, I do not think it is advisable *for all*. We seem to restrict ourselves, with a variety of very small modifications, to one

scheme of liberal education, which cannot be a wise plan, and is becoming impossible without grave loss.

While unhesitatingly giving a large place in the curriculum to languages, we have to consider that our choice is not altogether restricted.

Greek in a modern school is, I fear, out of the question: French is practically an essential.

I have always had a desire to hear the advocates of the use of the dead languages put Greek before Latin. It is equally beautiful; many think more so. It is the language of the New Testament, and it is a pity that so few can read the original. Finally, it is far more closely allied to modern Greek than Latin to Italian, and hence might be more likely to prove of practical use in later life. But I am afraid it is too late to get away from the bonds imposed upon us by the obvious needs of the Middle Ages.

As regards French, all are agreed that it is an essential in any school, and the new method of teaching it as a living language on lines similar to those suggested by Professor Rippmann with the use of Holzel's pictures, and also by Mr. Fabian Ware, in a paper in Vol. 3 of Special Reports, is becoming more common.

Hence I feel that no time need be spent in upholding the view that in modern schools, at least, we should make French our first foreign language, and that we should begin, in the first instance, with little detail as to grammar.

I have tried the plan for some time with complete satisfaction, and find that in the next stage the boys more readily master the rules of syntax, because they have a good vocabulary and can fix their attention on the rule before them and not on hunting out the French equivalent for the English words. It would be as well to add that in my experiment boys in the lowest form do no Latin and confine their attention to English and French.

With such premisses my suggestion is that in schools of the above type German should be taken at the next stage, followed by Latin in the case of certain boys—*i.e.*, reversing the practice usual at the present time, whereby *all* would take Latin, while a few do German during their last year, or perhaps two years. On these lines German would be the linguistic backbone, while Latin would be looked on as desirable for those who could attain to it.

Latin would not be abolished as in a German Realschule, and I believe it would remain within the reach of any boy likely to profit by it—a point of the utmost importance in view of the requirements of the various professional bodies.

It is only in one or two of the larger towns that a school can confine itself to providing for one type of scholar. I doubt whether, in England, there is any such secondary school. This, more than anything, *renders it necessary to retain Latin in some way.*

Would not such a plan as the above help us to provide both for those for whom Latin is an advantage and for those for whom it is of small profit?

We have generally to provide also for a few boys who enter the school quite young and are destined, from the outset, to pass on to a first-grade classical school. It ought not to be

impossible to arrange for them under the scheme to take Latin after French if desired.

The consideration of a draft of a time-table capable of much variation according to individual tastes and needs, but largely modelled on what I have found feasible in my own school, will perhaps make the suggested plan more clear. The reader must note that this time-table is not one actually in operation, but is one which the writer would adopt did circumstances permit of the experiment being tried. It is primarily intended to exhibit the above proposal in diagrammatic form.

In our consideration of any proposed solution of the problem we are naturally face to face with three questions:—

- (1.) Is there any necessity for such a change?
- (2.) Is there any advantage gained by adopting it?
- (3.) Is there any overwhelming loss attached to it?

1. Among the pupils for whom all secondary schools, except the great classical schools previously excluded, have to provide, one finds the majority to belong to one of two types:—

(a.) Those who would in former days have gone to the Grammar school and do so still, but who, from one cause or another, make no satisfactory advance in Latin.

(b.) Those whose education begins in the public elementary school, and whose parents are laudably anxious to give them a better education. These boys are intended for commercial life in its various grades, and they begin their secondary education only at the age of 12 or 13. We are all agreed that their education must be a *liberal* one, or it will be wasted, and the product dwarfed. Hence language should be, of necessity, a large—if not the preponderating element.

It is a necessity to provide for the latter, and the time at their disposal is extremely short: an advantage if we can do better for the former than we have done in the past.

Chambers of Commerce, again, tell us repeatedly that we must turn out boys knowing French and German well, and, in spite of much improvement, we have certainly not yet done enough in this direction.

Simultaneously with these demands, others have been made, until our curriculum has become more and more overburdened, and unless some relief is obtained, we cannot secure for boys who leave at 16, and often earlier, a *sound foundation* in the subjects which they have begun. Such facts seem to point to the *necessity* of a change.

2. As regards the second question, we may say that to provide what is wanted, and still give a liberal education to a new class of boy, is certainly one advantage. A second one is the probability of more rapid advance in Latin by the boys who really wish to learn it. As long as Latin is compulsory for all, three fifths of the boys in non-classical schools offer that worst form of drag on class teaching—passive resistance. While, if Latin

were begun at 13-14 years of age on an average by those who seem likely to profit by it, they would, when free from this drag, make twice the progress even in the limited time at their disposal. If "necessity" is felt to be too strong a term, I may at least claim that such a scheme is advisable unless there is any grave loss. This brings us to the third question and to the familiar and customary objections alleged against even the partial giving up of Latin by those who fear to see the standard of secondary education lowered.

3. The first objector would probably say (a) "Latin is the base language and must be learnt first."

Is not this an argument against beginning it too early? Surely it is not a right system of education to put the more complex form of language—the one most unlike his own—before a young brain. The result has often seemed to me very worthless, although it has demanded an enormous expenditure of time. To a young boy each word in Latin is merely a piece of a Chinese puzzle to be put in its proper place according to a set pattern. It is only years afterwards that he begins to see the true position of the language and the growth from it of modern languages. The teacher's object is incomprehensible to him, and, even though he does what he is told with charming docility, the work is often distasteful. Try him with something more within reach of his comprehension, *e.g.*, as I have above suggested with French, and you have on your side the powerful lever of the boy's own interest in the work.

To continue with German—at first on similar lines—seems the natural corollary.

This leads us to the second argument usually put forward. (b.) "The Chinese puzzle of Latin is an excellent—perhaps the best—form of mental gymnastic." Canon Lyttelton, in a most inspiring article on "Teaching and Organisation," seems to hold out this point as his last weapon. Such teaching as he there advocates should make the classical boy's life indeed a pleasure, but his argument is forcible only in the case of the classical schools, though it may have been so in all secondary schools of forty years ago. In our modern type we surely get enough mental gymnastic with arithmetic, mathematics, and natural science, as now taught, when we regard the increased number of hours allotted to them.

Is there not a danger that we are providing for too much mental gymnastic and losing sight of *literature*?

In addition to the above there is so much accidentence of a difficult character to be learnt in German and so many special rules of syntax that it would largely fill any possible void. No one, even if ignorant of German, who has read Mark Twain on the German language would be doubtful of its gymnastic possibilities. German, coupled with the large number of hours devoted to mathematical training, would adequately replace the Latin and Greek of the old days.

(c.) A third argument often used is that a liberal education is impossible unless the student reads the teaching of the

classical authors in the original. Even now, not nine out of ten boys of the type under consideration ever get far enough to read more than a tiny portion of perhaps two Latin authors, and they never open a Latin book again after leaving school if they can help it. If we gave up part of the time now spent on Latin to reading standard English authors and studying English words the boys would write better English, and know more of the history and great thoughts of a classical past. Even in classical schools, how many boys are in much the same plight after years of Latin and Greek? But in my case we have to deal with boys who are seldom subjected to any scholarly influence at home, who leave school young, and who *need German*. Few, if any of them, are "humanised" by such Latin as they acquire, and there is no time to put before them the masterpieces of their own tongue.

(d.) Would the proposed change be detrimental to those who require Latin?

Such a danger is clearly one which requires serious consideration. But, in the first place, I have pointed out that, being unhampered by the unwilling, they might be expected to make more rapid progress than at present, and thus make up for a late beginning. In addition, after learning the elements of a language such as German, they would find less difficulty with the elements of Latin, and this favours a more speedy advance through the earlier stages. Any loss seems to be easily counter-balanced by the gain, and the advantage, if not the necessity, of the change is apparent. For my own part, I do not hesitate to use the word "necessity" in considering the place of modern schools in a national scheme of education. Such a scheme is not worthy of the name unless it provides for a variety of types.

The plan of beginning Latin late is not merely theoretical. The experimental stage has been reached in Germany, and is fully described in a paper by Mr. Fabian Ware in Vol. 3 of *Special Reports*.

Moreover, it is to be noted that in this instance the *late* beginning of Latin is actually tried in a classical school—the Frankfort Gymnasium—as well as in the Real Gymnasium, which more nearly approaches our selected type of school. It is stated by Mr. Ware to have been an attempt to "satisfy the moderns," but in the opinion of those in authority has not been detrimental to the progress in Latin and Greek. The necessity arose for a common foundation which would admit of the passage of a boy from one type of school to another without undue loss, and we in England are face to face with the same difficulty. For example, it is stated on authority that 70 per cent. of the boys in one of the King Edward's Grammar Schools, Birmingham, come direct from the public elementary schools, though the average age of entrance is not stated.

Would not such a common foundation in secondary schools also help to avoid that early specialisation which is deprecated by Chambers of Commerce as illiberal, and by Headmasters as destructive of form-life, with its advantages? If German were the next stage to French the boys could work at it

in forms, and we should postpone the evils of "sets" to the latest possible time. Under present conditions, a boy who means to learn German, which will be of any practical use to him at sixteen years of age, must specialise at twelve or thirteen if his Headmaster can and will provide for it.

I do not pretend to disguise the awkward fact that it is easy to get competent assistants to teach Latin, while the above plan will require form-masters competent to teach French and German on new lines, of whom there is a scarcity. But, if required, they will be forthcoming by degrees, and such a difficulty ought not even to be considered as a weighty argument against the adoption of the plan if it is seen to be otherwise beneficial.

I have already spoken of my indebtedness to Mr. Fabian Ware's paper, and I must also gratefully acknowledge what I owe to an article on curricula in Mr. Barnett's "Teaching and Organisation," by the Headmaster of the City of London School. I am so obviously under a debt to Mr. Pollard that I know he would pardon me if I make further reference to two authorities whom he quotes. He mentions as advocates of some such step as I have suggested the late Professor Jowett and the late Professor J. R. Seeley. "Shall we ever have the courage," says Professor Seeley, "to invent a scheme of education frankly not classical?" The moment is propitious for some such attempt *if we have the courage!* Englishmen dearly love a compromise, and the existing state of secondary education is certainly one with even more than the usual loss attendant on a compromise. Neither party gets what it wants, nor do I think they will ever do until we go further and adopt the late beginning of Latin, at least, as far as modern schools and modern sides are concerned. There are, doubtless, schools in England, private or public, which have made the experiment. What we seem to want is such evidence of its advantages as will carry weight with the authorities when such a proposal is before them, and also the recognition by the Board of Education that they would accept such an interpretation of the usual clause in a scheme of an endowed school which states the subjects which must be taught. Some of those who would gladly embark on the undertaking, and give the chance to the new generation, are powerless to act until there is good evidence that public opinion is in support of the change. Whatever solution is finally arrived at, the problem is one of increasing importance owing to the increased tendency for boys in certain districts to begin school work in public elementary schools, to the commercial needs of the nation, and to the difficulty of obtaining sound educational results, while the time-table remains overloaded, and the time at our disposal is limited.

SHELDON R. HART.

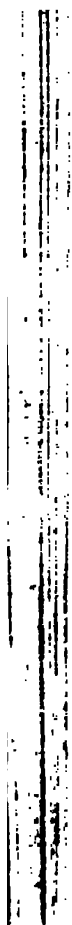
March, 1900.

DRAFT TIME-TABLE.

Subject.	I.	II.	III.	IV.	V.	VI.
Average age -	8½—10½	10½—12	12—13	13—14	14—15	15—16
Religious Instruction -	1	1	2	2	2	2
Mother Tongue -	6	5	4	2	2	2
History } -	4	4 or 3	4	4	3	3
Geography } -	—	—	—	3	3	4
*Latin -	—	—	—	3	3	3
German -	—	4 or 5	4	3	3	3
French -	6	4	4	3	3	3
Mathematics -	6	5	5	5	5	5
†Science -	—	—	1	3	3	3
Drawing -	1	1	2	2	2	2
Man. Instruction -	—	—	—	—	—	—
Physical Exercises -	2	2	1	1	1	1
Music (Singing) -	1	1	1	1	—	—
Grand total -	27	27	28	28	28	28
Home Work -	1	1½	1½	1½	1½	2½

* Non-Latin boys to take 1 hour English author, 2 hours extra German or Book-keeping.

† General Elementary Science Syllabus of London University or Locals.



NEWER METHODS IN THE TEACHING OF LATIN.

The aim of the present paper is to record in brief form the results at which the writer has arrived as to the best method of teaching Latin, especially to beginners of preparatory school age, but also with reference to adult beginners. The views here expressed are the outcome of a fairly comprehensive study of the literature of the subject and of some not inconsiderable experience in putting theories to the test of practice; but no attempt will be made to quote authorities or to deal systematically with the history of the question at issue. The method will be dealt with in its application to Latin only; but it is equally applicable to Greek, or indeed to any language. My experience, moreover, leads me to think that the question of the age of the pupil affects not so much the method to be employed as the rate of progress from one step to another: an adult beginner naturally goes faster than a beginner of childish years. No doubt a pupil who approaches the learning of Latin with a fully developed conception of syntactical relations—a ready-made apparatus of grammatical ideas—will have no difficulty in grasping certain fundamental facts of Latin which present great difficulties to the mere child; for example the use of the Accusative Case to denote the Object. Here the stage, if not the age, of the pupil may be a factor of considerable importance in the problem. But adult beginners with a fully developed sense of syntactical relations are rare: and even though the development of mind which necessarily attends on a greater age may make some difference in the power of grasping the elementary facts of the first foreign language learned, I have not found that it involves an absolute difference of method in the two cases. The reason may perhaps be that the child is almost inevitably presented with more new ideas than he can really digest; if the adult beginner is presented with fewer than his digestive powers would be capable of dealing with, it is a fault on the right side. At any rate, the methods to be followed in the two cases are identical in many essential points. *Uebersicht* before *Einsicht*—the broad features of the language before the details—is a principle which is dictated by common-sense and common experience in the case of the adult beginner learning a foreign language for practical purposes. That it is equally a principle which should guide the teaching of the young beginner is one of the main contentions of this paper.

We are familiar with the watchwords of two opposed camps on the subject of language-teaching. The old-fashioned view that the "declining of nouns and verbs," to use Dr. Johnson's phrase,

is a necessary preliminary to the reading of any text is nowadays met with the opposition cry of "Fort mit der Grammatik!" But we are not really compelled to accept either of these harsh alternatives, as the more moderate adherents of the *Neuere Richtung* are now fain to admit. Grammar has its proper place in any systematised method of teaching a language; but that place is not at the beginning but rather at the end of each of the steps into which a well-graduated course must be divided. Speaking of the course as a whole, we may say that the learning of grammar should proceed side by side with the reading of a text. The old view, which is far from extinct at the present day, though it is rarely carried out in all its rigour, was that the pupil must learn the rules of the game before he attempts to play it. The modern view is that just as in whist or hockey one learns the rules by playing the game, so in the study of a language one learns the grammar best by the reading of a simple text. But it is necessary at once to draw a distinction, which marks the difference between the earlier and the more developed form of the new method. The mistake made by the first zealots of the *Neuere Richtung* was that they plunged the pupil without preparation into the reading of what were called "easy passages"—passages taken from any ordinary book, and easy perhaps as compared with other passages which might have been selected, but still bristling with a multitude of heterogeneous forms and constructions. This was an "inductive method" with a vengeance; but it soon became evident that to expect a young beginner to work his way through such a jungle to the light of clear grammatical consciousness was to expect too much;* and even for the adult beginner the process is slow and laborious. For what is the object of grammar unless to make the facts of a language accessible and intelligible by presenting them in a simple arrangement? Here as elsewhere science ought surely to step in as an aid, not an obstacle, to understanding. But the *Neuere Richtung*, even in its extremest form, was justified as a protest against the traditional method of putting the cart before the horse—the "declining of nouns and verbs" before the reading of any text. What its advocates failed to see was that "nature" cannot dispense with "art"; in other words that the text which is to serve as the basis of an inductive study of the language must be specially constructed so as to exhibit those features on which the teacher desires to lay stress at a particular stage of learning.

What is the ordinary English practice at the present day? On this point others are more competent to speak than I; but I imagine I am not far wrong in saying that the first step in learning Latin is to spend a month or two in learning declensions and conjugations by rote—not, let us hope, complete with their irregularities and exceptions, but in outline. The pupil

* A distinguished representative of the *Neuere Richtung* admitted in conversation with the present writer some years ago that the teaching of French out of his own book was "Hundesarbeit" (horse-work).

then proceeds to the reading and writing of easy sentences, perhaps in such a book as "Gradatim"; and after say a year or more he will be reading easy selections from a Latin author. All the while he recapitulates his grammar and extends his grammatical horizon. This is, in any case, an immense improvement on the older plan of learning the whole of the old Eton Latin Grammar in its Latin dress without understanding a word of what it meant by its "as in praesenti" and other mysteries. If wisely administered this method may also avoid the error of "Henry's First Latin Book," which taught an intolerable deal of Accidence and Syntax to a halfpennyworth of text; though, on the other hand, Henry's First Latin Book was an attempt to accompany the learning of grammar with the reading of easy sentences from the very beginning, and in so far was better than the method we are considering. For I must maintain, with all deference to the opinion of others whose experience is wider than my own, that we are as yet far from having drawn the full conclusions of the process of reasoning on which we have entered. There should be no learning of grammar prior to the reading of a text. The declensions and conjugations, learned by rote apart from their applications, cannot be properly assimilated or understood, and often prove a source of error rather than enlightenment in subsequent study. They have to be learned over and over again—always in doses which are too large for digestion, and the pupil has meanwhile been encouraged to form a bad habit of mind. Half knowledge in this case too often leads to the unedifying spectacle of the Sixth Form boy and the University undergraduate who is still so shaky in his accidence that he cannot pass his "smalls" without a special effort, though in some respects he may be a good scholar. But still more serious is the effect of the false conceptions which are inevitably implanted in the mind by this method of grammar without understanding. The pupil learns *mensā*, "by or with a table," *agricolā*, "by or with a farmer"—both of them impossible Latin for the English in its natural sense; *mensae* meaning strictly "to a table" is almost impossible except after *impono*, etc. Yet he necessarily supposes that in some context or other they must have those meanings; it is often years before he discovers that he has been the victim of a practical joke. Some boys never see the fun to the bitter end; in other words, they never learn the syntax of the Cases at all. And what are the counterbalancing advantages of this method? The pupil is introduced at an early stage to the reading of selections from Latin authors. But what if the interest and stimulus of reading consecutive passages could be secured without the sacrifice of clearness and grasp which is involved in the method of preliminary grammar? The advantages would seem in that case to be all on one side. Each new grammatical feature of the language would be presented as it is wanted, in an interesting context, and would be firmly grasped by the mind; at convenient points the knowledge acquired would be summed up in a table (the declension of a noun or the forms of a tense).

The foundations of grammar would thus be securely laid; there would be no traps for the understanding, because each new feature would be presented in concrete form, that is in a context which explained it. For example, instead of *mensā* "by or with a table," etc., we should have *in mensā*, "on a table," *cum agricolā* "with a farmer," *ab agricolā* "by a farmer"; *ad mensam* "to a table" or sometimes "by (i.e. near) a table"; *agricolae dat*, but not *mensae dat*. After one declension had been caught in this way, the others would not need so elaborate a treatment. But still the old rule of "*festina lente*" would warn the teacher not to impose too great a burden on the young or even the adult beginner; it is no light task to learn simultaneously forms and their meanings, vocabulary, and the fundamental facts of syntax. It must be admitted that the method which I am advocating is a slow one at first; but it is sure, and binds fast. The method of preliminary grammar might be called the railroad method. The traveller by rail travels fast, but he sees little of the country through which he is whirled. The longest way round is often the shortest way home; and my experience has been that the time spent at the start without proceeding beyond the very elements of grammar is time well spent. A fair vocabulary is acquired—without effort—in the course of reading; for the learning of new words, especially if they are so chosen as to present obvious similarities to English words, is a task eminently within the powers of the youthful mind; and all words met with in an interesting context arouse attention and impress themselves on the mind of their own accord. All the while the pupil is forming his feeling for the language (*Sprachgefühl*) and becoming habituated to ordinary ways of saying ordinary things. He gradually loses that sense of strangeness which is the great barrier to anything like mastery.* At the later stages the rate of progress increases very greatly. At the same time it is not desirable to hurry over the ground, if permanent impressions are to be produced. Let the maxim be throughout "a minimum of grammar to a maximum of text." It is surprising how much can be said in Latin without using more than a single declension of nouns and adjectives and a single conjugation of verbs.† No doubt the transition from the "Reader" to the Latin author is thus put off to a later stage than is usual. But I do not regard this as a misfortune. On the contrary all Latin authors, as they stand, are far too difficult to serve as a basis of study for beginners; and they are also, I may add, not well adapted in respect of subject matter and sentiment to appeal to the mind of the very young. Caesar may no doubt be made interesting to a boy or

* There are some 1,000 verbs of the first conjugation in Latin (including compounds).

† One great advantage of this method, especially for adult learners who are able to cover the ground at a fair rate of progress, is that it lends itself to acquiring the "art of reading Latin" (as distinct from the art of construing it), to use Prof. W. G. Hale's phrase—the art of rapid reading.

girl of twelve by a skilful teacher with the aid of maps and pictures. But, after all, the Gallic War can never be what it was never meant to be, a child's book. The ideal "Reader," which should be the centre of instruction for say the first two years of a young pupil's course, should be really interesting; simple and straightforward in regard to its subject matter, modern in setting, and as classical as may be in form—a book which the pupil may regard with benevolent feelings, not with mere "gloomy respect,"* as worth knowing for its own sake. It should be well illustrated with pictures, diagrams, and maps, provided always that the illustrations are to the point, and such as are really felt to be needed to explain the text and make it live. "Modern in setting," for otherwise the book will not appeal to the young mind; yet there is much justification for the demand made by many adherents of the *Neuere Richtung* that the subject matter of any school book dealing with a foreign language should be closely associated with the history and the manners and customs of the people who spoke or speak the language. Possibly the two demands are not irreconcilable: the subject matter may be historical and national, but the point of view from which it is regarded may be modern. For English pupils learning Latin the reconciliation ought to present little difficulty; but nearly every great nation of Europe has its points of contact with Rome, and therefore its opportunities of constructing Latin Readers which are national in more senses than one. On the modern side they may be patriotic in tone, and inspired by that love of nature which appeals so directly to the youthful mind; on the ancient side they may be historical and instructive in the narrower sense of the term. And the illustrations should also have this two-fold character: they should include subjects both ancient and modern, it being always remembered in regard to the former that their object is not to make the boy or girl an archaeologist, but simply to act as an aid to the imagination and enable it to realise what ancient civilisation was like. A good modern fancy sketch may often be more instructive from this point of view than a cut taken from a dictionary of antiquities.

The method which I advocate is, therefore, on its linguistic side, analogous in several respects to the so-called "natural method" or to the method by which an adult, left to his own resources, usually attempts to master a foreign tongue. He begins by attacking some easy book or newspaper, with the help of a dictionary, and he picks up the grammar as he goes along. The method is in either case "heuristic"; in neither case does the learner attempt to reconstruct the language out of the grammar, as a palaeontologist reconstructs an extinct animal from a study of a few bones. But in the one case the learner works on a text which presents all the variety and complexity of nature; in the other, on a text which has been simplified and systematised by art, so as to lead directly to a clear view of certain fundamental grammatical facts. Granted the premises,

* Lord Rosebery in his Rectorial Address at Glasgow, 1900.

I conceive that there will be no great difficulty in accepting the conclusion; for there can hardly be a better method of teaching a language than that which combines the systematic order of the grammar with the interest and life of the story-book. The crux of the situation is to write such a school book; and though it may be long before an ideal book of the kind is produced, the problem ought not to be impossible of solution, if once the necessity of a solution from the teaching point of view is realised. On the one hand the ideal book ought to have a sustained interest, and if possible to form a continuous narrative from beginning to end; otherwise much of the effect is lost: this adds materially to the difficulty of writing. On the other hand there are various considerations which lighten the task. The writer has before him an infinite variety of choice in regard to his subject matter; and though his grammatical order must be systematic, he is under no obligation to confine himself absolutely to the narrowest possible grammatical field at each step. For example adjectives* may be, as they should be on other grounds, treated side by side with the substantives which they resemble in form, and the easy forms of *possum* (e.g., *pot-es*, *pot-est*, *pot-eram*) side by side with the corresponding forms of *sum*. Here we have material for the building of sentences. We may even go further and admit a certain number of forms which anticipate future grammatical lessons, provided they are not too numerous or of such a character as to confuse the grammatical impression which it is the purpose in hand to produce. For example, forms like *inquam*, *inquit* might be introduced, if necessary, long before the learning of the defective verbs was reached; they would, of course, be accompanied by their translations and treated as isolated words without any grammatical explanation. Tact in introducing only such forms as are not liable to lead to false inferences is necessary; and, of course, the fewer such anticipations there are the better. A certain latitude must also be conceded in regard to idiom and style. While it is of importance that the pupil should come across nothing which might re-act disadvantageously on his future composition, it is mere pedantry to insist on any exalted standard of literary excellence. The writer who works under the limitation imposed by the conditions of the problem should not attempt any high style of diction; it is sufficient if his Latin is up to the standard of such isolated sentences as usually form the mental pabulum of the beginner, though it might well be somewhat higher.

I would here anticipate a possible objection. Would not such a book be too easy? Would it provide a sufficient amount of mental gymnastic to serve as a means of training the faculties of reason and judgment? That would depend altogether on the aim which the writer set before himself. There is plenty of room within the limits of the first declension and the first conjugation for the training of the mind in habits of accurate thought and

* Including Possessive Adjectives and Participles (Verb-adjectives).

expression; for instance, the sentences may be made as difficult in regard to order of words as you please. But I would urge that they can hardly be made too easy at the beginning. It is sometimes forgotten that mental training is not synonymous with the inculcation of a mass of grammatical forms which only burden the memory, and that the habit of reading with care and fluency is itself a mental discipline of the highest value. What the teacher of any language has to do is not to accustom his pupil to regard each sentence as a nut to crack or a pitfall to beware of; but rather to induce him by the art of "gentle persuasion" to look upon the foreign tongue as a friend to be approached on terms of easy familiarity. Difficulties will accumulate fast enough, and I submit with all deference that it is a mistake to convert the learning of any foreign language into an obstacle race, by deliberately throwing difficulties into the path of the learner. Latin, at any rate, is hard enough in itself. And a habit of thoughtlessness is surely the last thing that will be encouraged by a method such as that sketched above, by which learning is made a matter of observation from the first, and not of unintelligent memorizing.

It goes without saying that the grammar to be taught in such a book should be limited to the necessary and normal. All that is in any way superfluous to the beginner should be rigorously excluded. But so soon as a general view of the whole field of regular accidence and the bare outlines of syntax has been attained by way of the Reader, the time has arrived for taking the pupil over the same ground again, as presented in the systematic form of the grammar. He is now in a position to understand what a grammar really is—not a collection of arbitrary rules, but a *catalogue raisonné* of the usages of a language based upon observation and simplified by science. Successive recapitulations should take in more and more of what is abnormal, until a fairly comprehensive view of the whole field is obtained. The suggestions of whatever new texts are read should, of course, be utilised in preparing the mind for irregularities and exceptions; but it is no longer perilous to study the grammar apart.* Each course of grammar deepens the impression made by those which precede it, and at the same time extends the pupil's mental horizon, the successive courses being superimposed on one another like a number of concentric circles with ever widening diameters.

I have said nothing about the writing of Latin, because it is obvious at the present day that reading should be accompanied by writing from the first, and, what is even more important, that the sentences to be translated into Latin should be based on the

* How far it is necessary to have more advanced Readers to support the grammar at this stage I do not undertake to say. Much will depend on the age and the individuality of the pupil. But the advantages of systematic practice in such things as principal parts of verbs either by way of a Reader or by way of composition are obvious. If merely learned out of a grammar such things are apt to have a very insecure hold of the memory.

subject matter and vocabulary of the Reader. Learning a language is largely an imitative process, and we must not expect our beginners to make bricks without straw, any more than we expect pupils at a more advanced stage to compose in the style of Cicero or Livy without giving them plenty of models to work upon. It is more important to insist here on the importance of training the organs of speech and hearing even in learning a "dead language" like Latin. For a dead language is still a language, and cannot be properly grasped unless it has some contact with living lip and living ear. Let the pupil then become accustomed from the first to reading Latin aloud, and to reading it with intelligence and expression. It is a habit which does not come of itself; but to teach it goes a long way towards making the language live again, and acts as a most valuable support to the memory. Let anyone try learning a little modern Greek, and he will appreciate the difference between remembering the accents by ear and remembering them by the eye alone. So, too, in regard to forms and vocabulary. What we have to familiarise our pupils with is not merely the look of the word and the phrase and the sentence on paper, but still more the shape of them to the ear—their *Lautbild*. The training of voice and ear thus secured will not merely teach "quantities" by imprinting them firmly on the ear, but will also react favourably upon the pupil's pronunciation of any other foreign language which he may be learning, and even of his mother-tongue itself. In regard to the pronunciation of Latin, any system which does not involve a violation of Latin quantity is innocuous; but the so-called "new pronunciation" is not a difficult thing to teach if it is begun early, and it is an excellent preparation for the vowel system of French and German. Subtleties, however, should not be insisted upon; to make the problem of teaching difficult is to supply the opponent of reform with an unanswerable argument.

One word on terminology. Technical terms in grammar are a necessity, as in every other science; but it unfortunately happens that the terms of grammar are mostly either meaningless or more or less misleading. The first class is less noxious than the second; but the less the young beginner has to do with either of them at his first introduction to the facts which they represent, the better. If he learns to know the cases in the first instance by their numbers (1st, 2nd, 3rd, etc.) rather than by their names, he will probably be saved some mystification. A term like "Subjunctive Mood" should at least be accompanied by a warning that the name does not correspond to the thing. When this mood is first introduced in the Reader,

* The so-called new pronunciation is really the pronunciation which was universal in the sixteenth century. The "melancholy change" took place during the life of Dr. Caius, the physician of Henry VIII., who refounded Caius College, Cambridge, in 1538 (Rashdall, "Universities of Europe in the Middle Ages," II p. 595 n.). About this time the pronunciation of English suffered a rapid change, and the pronunciation of Latin went along with it.

it should be in such instances as throw light upon its fundamental meaning, that is in expressions of desire, like *cantet*, "let him sing" or "may he sing." Usages which are apparently irrational should be deferred. A reform in terminology is always a difficult matter, though perhaps there would be less difficulty about it at the present day than there was in the past. But it has always seemed to me that we ought at least to make our technical grammatical terms as uniform as possible in the different languages taught in schools. It would be an immense boon to teachers and to pupils if the twentieth century should go further and authorise a comprehensive reform by which certain of the most objectionable terms (like "Subjunctive") would be ejected from the positions which they have so long unworthily occupied.

So far I have spoken only of the ideal Reader and its attendants—grammar and elementary composition. The literary point of view has not been entirely ignored; for I have pleaded for a certain literary character, though not for "style," in the Reader itself. But so soon as the stage of reading an author arrives the literary point of view should become prominent in the teaching. To study an author in a literary spirit is, I conceive, to read him as he intended himself to be read—not necessarily with a view to any flowers of diction or specially effective passages such as might appear in a chrestomathy, but always with appreciation of what there is to be appreciated. Cæsar is read in a literary spirit, if his story is followed with intelligent interest; a poet demands in addition to an interest in his matter an appreciation of his form and language. But no author can produce his proper effect upon the reader, if he is read in a perverse order. This point of view is too much lost sight of at the present day, with the result that the study of the Classics is converted into little more than a long training in the use of the grammatical microscope. There could hardly be a greater offence against the masterpieces of ancient literature. It is no wonder that the ascent of Parnassus is found to be a difficult one, when no attempt is made to lead the climber along a possible path. The poet vainly plunges *in medias res* if his reader repeats the process by taking him up in the middle, then proceeds to the last book, and finally fills up the gaps in any order that chance may dictate. Probably the origin of this preposterous method of reading is to be found in the fact that most of the masterpieces are too long to be read entire; the teacher, therefore, gives up the task as hopeless, and resigns himself to what he regards as the only alternative—a complete abandonment of all attempt at sequence in reading. But it is not really the only alternative. To study a literary work as a whole does not necessarily involve reading the whole of it. This idea has recently taken practical shape in the numerous "shortened editions" which have issued from the German press.* What is unessential to the story is cut out and replaced by a summary

* *E.g.*, the series published by Messrs. Velhagen and Klasing.

in German of the contents of the omitted passages. By this means the unity of interest is maintained, and from the educational point of view the gain in simplicity and intelligibility of the whole to the beginner may more than compensate for some loss of variety and complexity of detail. A "shortened *Æneid*" of this kind can be read from beginning to end during a full school course, without making more demands on the time of the pupil than the current method of haphazard reading. Such shortened editions must be carefully distinguished from mere "selections," for in the former the leading idea is to keep the unity of the work intact, in the latter merely to give specimens; but even specimens may serve a useful purpose in the case of such a book as the *Metamorphoses* of Ovid. But in the case of the *Æneid* the Prussian *Lehrpläne* demand some comprehension of the work as a whole, insisting that the understanding of the content of any literary work is the main point. On this principle the *Æneid* is reduced in Becker's edition to about half its bulk. But the Greek plays in the same series are given entire, including the choruses. It is worth considering whether some such *modus operandi* might not be adopted on a large scale in England; if objections are felt to omissions, it might be possible to read parts of the work in an English translation.*

From the point of view of the University a reform in school procedure, both on the literary and on the grammatical side, would confer lasting benefits.† There must be many University teachers who, like the present writer, feel dissatisfied with the scrappy and haphazard knowledge of the classics commonly presented by students reading for Pass degrees, and who would welcome a change to something more comprehensive and better suited to the adult intelligence. But the foundations must be laid during the long school course, as the developed flower must be present in the germ. By not hurrying over the initial stages, and by a wise guidance of the later steps, the consummation of a worthy classical culture may be reached in the end.

Christmas, 1900.

E. A. SONNENSCHIN.

* Compare the Presidential Address to the Teachers' Guild (May 1900), by the Master of Trinity College, Cambridge.

† Professor Postgate (*Classical Review*, February 1901) demands a "thorough revision of the modes and materials of classical and especially elementary classical teaching," adding, "Though we of the Universities have a serious grievance against the schools in that they send us so many mistaught on elementary points, and, what is worse, emptied of all desire to learn, we must not forget our own deficiencies." Compare "The Philosophy of the Humanities," by T. Fitzhugh, late Professor of Latin in the University of Texas (issued by the Chicago University Press). The results are summed up in practical shape in the same author's "Outlines of a System of Classical Pedagogy" (Berlin: Mayer and Müller, 1900).

THREE SCHOOL JOURNEYS IN YORKSHIRE IN 1899.

1. THROUGH THE VALLEY OF THE DON.* BY BOYS FROM
THE CENTRAL HIGHER GRADE SCHOOL UNDER THE
BARNSELY SCHOOL BOARD.

I.

The chief idea of this scheme was to traverse the Don Valley. This was planned so that six visits would include the entire stream.

Scheme of School Journey recently adopted by the Barnsley School Board.

- Visit 1. Source of Don. Dunford Bridge to Penistone.
- Visit 2. Penistone to Wharnccliffe Crag. Great Don joined by Little Don at Deepcar.
- Visit 3. Sheffield (Industries, Ruskin Museum, Mappin Art Gallery).
- Visit 4. Conisboro Castle (Ivanhoe district), (Dearne joins Don).
- Visit 5. DONCASTER.
- Visit 6. Port of Goole. (Don joins Ouse.)

VISIT 1.

Source of Don.—Dunford Bridge to Penistone.
(Don Celtic Dwn = Dark).

Source.

High spongy moors about Holme Moss; 1,859 feet above sea-level. From source to Penistone, wild and dreary millstone grit district. Quarries (flags). Gannister, &c.

Public Works.

- (1.) Great reservoirs owned by Dewsbury and Heckmondwike Corporations.
- (2.) Entrance to famous Woodhead Tunnel (Great Central Railway). Tunnel three miles long, cost 200,000*l.*, cut through millstone grit, took seven years. Vignoles the engineer.
- (3.) Manchester reservoirs on the other side of the hills.

Geography.

Source, tributary, river, hill, valley, watershed.

Botany.

Daisy, dandelion, buttercup, heather gorse, peat (formation and uses).

Natural History.

Rabbit, wasp, bee, worm, trout, stickleback, grouse.

[* In order to prevent possible misunderstanding it seems desirable to state here that the Law Officers of the Crown, to whom the matter was referred, are of opinion that a School Board cannot legally pay out of the School Fund any expenses incurred in connection with School Journeys.—Ed.]

Penistone.

Visit church (Wordsworth's ancestors buried there), Cammell's steelworks, Penistone 747 feet above sea-level, the highest market town in England. Important in old coaching days.

Parliamentary Division, Holmfirth.

Contrast the wild heather-clad hills with the cultivated valleys and populous districts. Notice cairns, rocking stones, tumuli, and earthworks, and the battle grounds of the earliest races.

VISIT 2.

Penistone to Wharnccliffe Crag.

Tributaries.

The Don receives the Little Don at Deepcar, Ewden (Loxley and Rivelin at Owlerton).

Towns and Villages.

Thurgoland, Wortley, Deepcar, Wharnccliffe and Oughtibridge.

Natural Features.

Most beautiful part of river. Gigantic woods. Valley deeper and more enclosed. Lady Mary Wortley Montague described Wharnccliffe Crag as the most beautiful place and prospect she ever saw.

Minerals.

River now flowing over coal measures. Iron worked in Don Valley for many ages. Wortley (ironworks and stone quarries), Deepcar and Oughtibridge, gannister, steel and file works. Pits.

Wortley Hall.

Earl Wharnccliffe's mansion—Italian style—interior contains fine paintings not only by the Old Masters but also by Poynter and other modern masters—Dragon of Wantley.

Parliamentary Division. Hallamshire.

VISIT 3.

Sheffield—(Sheaf joins Don).

Wincobank Hill.

From old British fort magnificent views of Don Valley, Sheffield and Rotherham seemingly at one's feet.

Public Institutions.

Town Hall, Firth College, Ruskin Museum, Mappin Art Gallery, and Parish Church. (Rodgers, Vickers, Brown's works). Electricity Station. Electric Tramway.

Historical Associations.

Earl Waltheof (the Saxon). Roger de Busli (the Norman). Mary, Queen of Scots imprisoned here. Earl Shrewsbury, the 6th earl, was Mary's custodian. Tutbury, Sheffield and Fotheringay. Duke of Norfolk. Chaucer alludes to Sheffield whittles. Cardinal Wolsey here a fortnight after his fall. Her Majesty the Queen opened the Town Hall three years ago.

Great Names.

Chantrey, the great sculptor, born near Sheffield. Ebenezer Elliot "The Corn Law Rhymer." James Montgomery, the poet, died April 30th, 1854, at 82 years of age, 62 spent in Sheffield.

Cutlers' Company.

Cutlers' Feast like Lord Mayor's Banquet in London.

Industries.

Not only cutlery, but armourplates for ironclads, the Siemens Bessemer steel plates (electroplating), and every variety of heavy goods. Iron ore brought from Sweden, Norway, Russia and Spain. Finds employment for thousands.

Parliamentary.

Sheffield sends five men to Parliament.

VISIT 4.

Conisbro' Castle=Conings Burgh=King's Town or Fort.
Ivanhoe Country—Athelstan's Castle.

River.

Receives the Dearne from above Barnsley. Limestone cliffs. Beautiful scenery. Great resort of pleasure seekers.

Castle and its History.

Owned by King Harold. Ruin occupies several acres. Commanding position. Thickness of walls. Tower 90 feet high. Narrow flights of steps within the thickness. The Conqueror gave the castle to William (Earl of Warrenne). Owned by Richard of York, killed at Wakefield, 1460. Edward IV. his son, was Lord of Conisbro'. Henry VII. married Elizabeth of York and secured the Conisbro' Estate.

Church of St. Peter.

Dates from Saxon times, great antiquity. Saxon tomb. Very ancient font and interesting monuments.

Industries.

Mexbro' and Swinton glassworks, potteries, coal-pits (Cadeby Pit said to be one of the deepest in South Yorkshire). Limestone quarries and ironworks. These great industries near Conisbro' quite change the appearance of the district.

Mexborough.

Visit Castle Hill and note earthworks.

Villages.

The villages near are Cadeby, Sprotbro' and Warmsworth.

VISIT 5.

Doncaster (Danum a Roman Station).

History.

Battle of Hatfield. Thomas, Earl of Lancaster, assembled his forces here prior to the Battle of Boroughbridge. Edward III. ordered Sir Robert Wells and Sir Ralph Gray to be beheaded in the Market Place for supporting Duke of Clarence. Aske's rebellion in Henry VIII.'s reign called "Pilgrimage of Grace." Both Roundhead and Cavaliers occupied Doncaster in turns during Civil War. Death of General Rainsborough. Doncaster Incorporated in Richard III.'s reign.

Position between London and the North.

Position between London and the North, on the North Road made it a famous coaching centre. To-day it is a famous railway centre, and is a favourite and pretty residential town. River sluggish. Flat country, but well wooded.

Railway Plant.

Principal depôt of Great Northern Railway and employs thousands of men.

Famous Names.

J. F. Herring, the artist. Cartwright, inventor of Power Loom, first opened his mill on the river here.

Public Buildings.

St. George's Church, restored by Sir Gilbert Scott, fine Church Mansion House. School of Art. High Street famous.

Miscellaneous.

Famous Races. Butterscotch. It possesses best market in England. The centre of a large agricultural district.

Parliamentary.

Doncaster division. One member.

VISIT 6.

Port of Goole.

The Don joins the Ouse by a channel called the Dutch River. Tide rises eleven feet at Goole.

Characteristics of District.

A great flat plain. The Fen district of Yorkshire. Scenery tame. Resembles Dutch landscape, intersected by dykes. The river runs between high treeless banks.

Dutch Outlanders.

Cornelius Vermuyden, Dutch engineer in Charles I.'s reign first drained the swamps and made a new channel five miles long from Cowick to Goole, hence name Dutch River. Dutch Outlanders resident in district to-day. Peat Moss Litter Company.

Port.

A modern port. Owes importance to Aire and Calder Navigation Company. Large trade. Fine docks. A rising port. Vessels drawing eighteen feet of water can use docks.

Miscellaneous.

Thorne, higher up the river, is a semi-seaport. Possesses quay. Ships come up from Goole and Hull. All the district was formerly a huge swamp. Interesting finds are made now and again of skeletons, animals, coins, and giant trees.

Parliamentary Division of Osgoldcross.

The Basin of the Don sends ten representatives to Parliament.

II.

PREPARATION.

To make the school journey a success a small time-table of outdoor instruction should be drawn up, the subjects of course depending on the district visited. The route taken should be studied beforehand, so that every one knows the times of departure and the distances to be traversed, these latter being duly noted on the map prepared by each young traveller.

The danger of attempting too much should be avoided; this remark applies not only to the ground traversed, but the instruction given. A good set of popular glees help to while away dreary periods and here be it noted the best of our National airs should receive attention.

The visits are made at stated intervals and occupy one day. There are great advantages in allowing intervals of school work, because not only will the scholars more thoroughly assimilate previous instruction, but be efficiently prepared for the next journey by collecting, comparing, and arranging the various branches of information bearing upon that district.

The first question naturally asked would be, "Who pays the journey's expenses?" The answer, "The scholars themselves."

Six months previously the parents had been informed of the scheme and invited to allow their children to contribute small weekly payments; the idea was taken up with great enthusiasm and more was contributed than was needed. Railway expenses did not bulk as largely as one at first imagined. For such a journey as the moorlands, the children took their own provisions, afterwards using the bags and satchels as a receptacle for specimens.

The children making the journey assemble at the usual hour at school, where registers are marked, and then proceed either by train, waggonette, or on foot as circumstances require. It may be mentioned here that not more than 20 such attendances may be claimed during the school year.

One of the pleasantest features of the scheme was the great interest the parents took in its working; the writer met them frequently not only on the departure but also on the return. Nay, on several occasions he has received valuable assistance, one case particularly:—The father of one of the boys, on learning the route we were taking, asked if visiting a certain famous hall was included in the programme. Finding such was not the case, he left his business and made a special journey to secure permission. Having a little influence there, permission was granted. A most delightful treat was thus secured, as the visit included an inspection of some magnificent conservatories, nectarine and peach houses, vineries, and flower gardens. Some parents have even expressed a desire to accompany us on our next year's journey. Mr. Baldwin, our respected school board clerk, not only accompanied us several times, but also acted as guide. His genial enthusiasm has done much for the success of the scheme.

III.

AN ACCOUNT of a SCHOOL JOURNEY taken by the Upper Class Boys of the Central School, Barnsley, September 14, 1899.

Central School, September, 1899.

On Thursday last, Sept. 14th, the top class of boys made a school journey, the objective being the exploration of the upper reaches of the Dove, and the tracing of its course into the Dearne, at Darfield.

Incidentally, we were able to examine Wentworth Castle, locally known as Stainborough Hall, with its wealth of tapestries and cabinets, and a remarkably fine collection of portraits.

We started off from school as soon as the registers were marked

and proceeded to the park, where we purposed ascending the tower, to have a glimpse of the country we were to explore.

We were able to notice, with a little more thought than usual, how prettily the park is laid out, what lovely little nooks there are, with their shady seats, and what a wealth of flowers and plants the parterres held.

From the top of the Locke Park Tower we had a remarkably fine view.

We were able to trace the course of the Dove to its source near Thurgoland, and saw the Penistone Moorlands beyond. In another direction we saw much of the Valley of the Dearne open to our view. Below us we saw the district we wished to explore, and we were not surprised to learn that when our Queen, then Princess Victoria, visited Barnsley, she stopped her carriage at Bank Top so that she might admire the fine view. Even to-day, dotted as it is with huge industries, it is grand, but *then*, the range of richly wooded hill and vale, with Wentworth Castle standing out above the Serpentine it would be infinitely grander.

After our geography lesson we learned the history of our public park. We got to know that Locke was a famous engineer, a contemporary of George Stephenson, and that the park itself was originally a racecourse.

As we descended the hill toward the River Dove, we were interested to learn the French names of the familiar trees, flowers, animals, and objects en route.

On arriving at the river, we were fortunate in coming across an artist, who had just completed a painting of the identical rustic bridge by which we were going to cross.

Ascending the hill again, our headmaster entertained us with a description of the Wentworths, whose home we were to see. We heard of the famous Strafford who was beheaded, and of the Wentworth who was Governor of Calais.

The approach to the Castle is very pretty, herds of fallow deer, and the famous "Jacob's Flock" of sheep, were grazing in the Park.

By an ornamental bridge we crossed the Serpentine, and then climbed the hill to the Castle itself.

We had another fine view from here. We interviewed the "concierge" at the house, and were allowed to inspect the Castle under her able guidance.

The boys were interested in her account of the portraits and other objects of interest that were pointed out, and we had a very instructive three-quarters of an hour.

As we entered we saw the portraits of Wentworth, who was Queen Anne's Ambassador, and of the three Kings of Poland, Prussia, and Denmark, who had been entertained there together.

The pictures on the ceiling were very fine, the panelling, showing the four seasons. The antique chairs and cabinets of every sort and nationality, were truly wonderful; a particularly interesting object was a copper chest, formerly owned by Mary Queen of Scots. Cabinets, Florentine, Dutch, Indian, and the tapestries in the three state rooms were perhaps the most remarkable among others.

Statues emblematic of the four seasons, after Flaxman, and the statuary which was given by Queen Anne, of Apollo Belvedere, Bacchus, an Egyptian Priestess, and carving by Grinling Gibbons, were shown to us. The picture gallery is 180 ft. long, 34 ft. wide and 30 ft. high. Among the most famous pictures, which included works of Rubens, Van Dyck, Holbein, Lely, etc., may be mentioned Charles I. and his Wife, David with Goliath's Head, the famous Earl of Strafford, the Holy Family, Charles II., Peter the Great, Queen Anne, Sir Philip Sidney, Cleopatra's death, Mary Queen of Scots, Lord Canning (known as Clemency Canning), and many others of historical interest.

We left the Castle at four, and reached the school again in time for dismissal, after having spent a most interesting and instructive, and we must not forget to say, enjoyable afternoon.

IV.

AIMS AND RESULTS.

What commends the school journey so much to one's mind is, that it suggests a return to more natural methods of acquiring knowledge. It teaches us, in fact, to avoid that most fatal of all mistakes—endeavouring to educate ourselves by books alone.

Our scholars have been taught too much from books and set lessons, so that there is an increasing danger of their losing the power to go searching out knowledge for themselves, losing the discriminating faculty of selecting the kind of knowledge really needed for our education, and losing the best method of obtaining such knowledge at first hand.

Another valuable feature is the physical and moral training possible in the school journey scheme. For a race of explorers and colonisers this is much better than a fortnight's military drill at a boys' camp. The organiser of the journey can utilise the varied physical and intellectual powers of his company, assigning to each different duties and researches according to taste and ability, and combine all their work so as to achieve a definite end, like a leader of a great scientific expedition.

Our scheme, we trust, is after all but a tentative one. Why should we not take a tour for several days amongst the delightful hills and dales of Derbyshire?

Then with experience gained, we could give a decided impetus to the teaching of foreign languages by taking our elder scholars to some carefully selected spot in either France or Germany. Surely what a German school did in England last summer is not an impossibility for an English school.

[The writer would not like to conclude without expressing his gratitude to Mr. W. P. Turnbull, H.M.I. (N.E. Division), for his assistance. By his advice and kindly help he has done much to secure for the English school journey the recognition it deserves.]

JNO. MATTHEWS ENGLAND

Central Higher Grade School,
Barnsley.

November, 1899.

THREE SCHOOL JOURNEYS IN YORKSHIRE IN 1899.

2. TO ROCHE ABBEY, SANDBECK, AND FIRBECK.

BY BOYS FROM THE THORNHILL BOARD SCHOOL, ROTHERHAM.
ROTHERHAM SCHOOL BOARD (U. D.)

The long-wished-for day arrived, with a clear sky and a light breeze, an ideal day for a country ramble. The opening exercises over, and registers marked, a start was made at 9.40. The boys, eighteen in number, were accompanied by Mr. Wollman, Headmaster, and Mr. Flamank, Certificated Assistant. The journey was made on July 20, 1899. We had timed ourselves to be at the various halting-places so as to be able to keep up a speed of not more than three miles an hour, and this plan worked excellently.

The boys had previously had the times of arrival and departure given to them, together with a map of the route on the blackboard, and were on their mettle to act strictly up to the programme. Note-books were taken, and were well made use of for sketches, inscriptions, and indeed for anything worth noting. It may be mentioned here that a description of the journey was subsequently written by the boys and submitted to the Board.

We were confronted with our first taste of hill-climbing at the end of Wellgate. This is a long and tedious ascent to the village of Broom. The name is undoubtedly derived from the Anglo-Saxon word "brum," which means "broomy" or "heathy," on account of the local vegetation.

Leaving Broom, we had a hilly and winding road until we reached Wickersley.

Along this road the hedges were bright with the wild rose, honeysuckle, bindweed, and other hedge flowers, while the banks were covered with a profusion of wild convolvuli, some pure white, some pale pink, and others white with delicate pink stripes running from the centre to the edge of the calyx, and yet no two could be found exactly alike.

Before reaching Wickersley, time was found for discussing the origin of the name. The Anglo-Saxon word "wicca" means "witch," and "lege" was their name for meadow land. The latter word probably became changed into "lia," "ley," or "lea," and so we get Wickersley, meaning "Witches Land."

The old Grange here is said to be haunted by one of the de Wickersleys, who, it is stated, may be seen at midnight mounted on his white charger, pacing the courtyard.

The Church was our next objective. The great difference in style between the tower and the spire was at once noticed, and the main features of Norman architecture were contrasted with those of other times.

Leaving Wickersley, a lovely walk of about a mile brought us to Bramley, a pretty little hamlet, whose name also is derived from the Anglo-Saxon "brum." Here we crossed a small stream,

whose water was remarkably clear and fresh. It is part of the stream which flows through the Abbey grounds.

Another short walk, and we arrived at the village of Maltby. Here the first object of interest was a stream of clear sparkling, intensely cold water, coming from the rocks above the road. This spring provides water for the village, even when the wells fail to yield their usual supply. In about the centre of this pretty village there is an old cross mounted on steps. It is supposed that the market-women used to come and sit on the steps around the cross and sell their produce, hence it is known as the Market Cross or Butter Cross. There are many who do not agree with this supposition, but its central position on the main road would seem to be greatly in its favour. This explanation brought forth mention of other crosses, as, for instance, Charing Cross, Holy Cross, and Weeping Cross.

On one of the old houses near the cross, there is a sign to be seen, in the form of a shield let into the wall, and on which is the following inscription:—"Come early to-morrow for good ale, and you shall have it for nothing."

The explanation of this is, of course, that "to-morrow never comes."

After a cursory glance at the quiet-looking little church, nestling in a grove of magnificent trees, its white stone spire contrasting strongly with the rich green foliage, we set ourselves to climb the road leading to the top of the crags. At a distance of a quarter of a mile from the village we turned to take a last look at Maltby before descending the crags. In the foreground there was the road we had toiled along; to the left lay the crags sloping steeply away to the beautifully wooded valley below, reminding one forcibly of the lines—

"As down the shaggy steep of Snowdon's side
With toilsome march he led his long array."

But most beautiful of all was Maltby, lying at the foot of the hill with its quaint white-walled, red-roofed houses peeping out between the trees. It was, indeed, a pretty picture. The view called forth the remark from one of the boys that he wished he were an artist. He was reminded that some artists paint their pictures in words, and that he would have an opportunity of doing so later on.

Leaving our point of vantage with reluctance, we left the road, descended the crags by a very rough path, and entered a lovely glade known as the Norwoods, which probably means Northwoods. It was originally made for the Countess of Scarborough as a private path from Sandbeck to Maltby Church.

Here we could walk two or three abreast, shaded from the sun overhead by the thickly leafed trees which covered the hillside on the left, and calmed by the soothing sound of the stream running close by on the right between an avenue of willows. While sauntering through this lovely glade we were

regaled with the history and associations of the Abbey by Mr. Wollman. Roche or "Rock" Abbey was built by the Cistercian or White Monks, probably in the twelfth century. As far as is known, these monks had none among them whose special business it was to design the beautiful buildings they have left behind them, neither have any plans been found. It is generally supposed that they would meet to discuss these points, and when agreed, carry on their work from memory. If this were so, it is truly wonderful to notice the fine proportions, the wealth of detail, and the beautiful geometric tracery of the windows. The transept can easily be made out since the recent excavations, and on the east side of the transept there are indications of two chapels. Here also may be seen some good specimens of stone coffins in which the monks were wont to bury their dead.

As a rule, the kitchen was generally at one extremity of the building, but at Roche an extension of the kitchen was built, probably for the purpose of being nearer to the stream, in order to dispose of kitchen and other refuse. It was not a difficult matter, in these surroundings, to conjure up a vision of the "monks of olden days" going about their daily tasks, some fishing for their dinners in the stream; some tending their vegetables and herbs in the garden; some doing the ordinary work of a housewife, for they were their own servants, while others would be going on errands of mercy or strolling through the woods in order to be quiet for reading or meditation.

A short walk by the side of the stream brought us to "The Mill," most of which is of modern construction, but portions of the old building still remain. Truly has it been said of these monks, "They dreamt not of a perishable home who thus could build."

After a short rest and refreshment we very unwillingly left the Abbey grounds, striking the road to Sandbeck.

A short distance from the Mill is the little village of Stone, which, as its name implies, is built of, and surrounded by, stone. Here we saw some large caves, which at one time had been used as dwellings, as could be seen by the fireplaces, the rudely-made outlets for smoke, niches which had been made for seats, and the levelled floor. In one or two inhabited houses the kitchen was cut out of the solid rock.

A sharp walk of half an hour brought us to Sandbeck. Sandbeck Hall, the seat of the Earl of Scarborough, is a fine building, but after Roche Abbey no architectural treat. We saw large numbers of deer in the Park. A brief view of the pictures and other treasures would have been welcome, but, the family being in residence, we had to forego that pleasure. We had one mile more to walk ere our outward journey was complete.

We reached Firbeck, a rather pretty hamlet, about 2.30, and after a short rest entered on our homeward journey, taking the path through the fields to the Abbey, instead of the road, which proved a delightful change. A short halt was called at Maltby for

rest and refreshments, and so back to Rotherham, which we reached at 6.45 p.m., having covered a distance of about 20 miles.

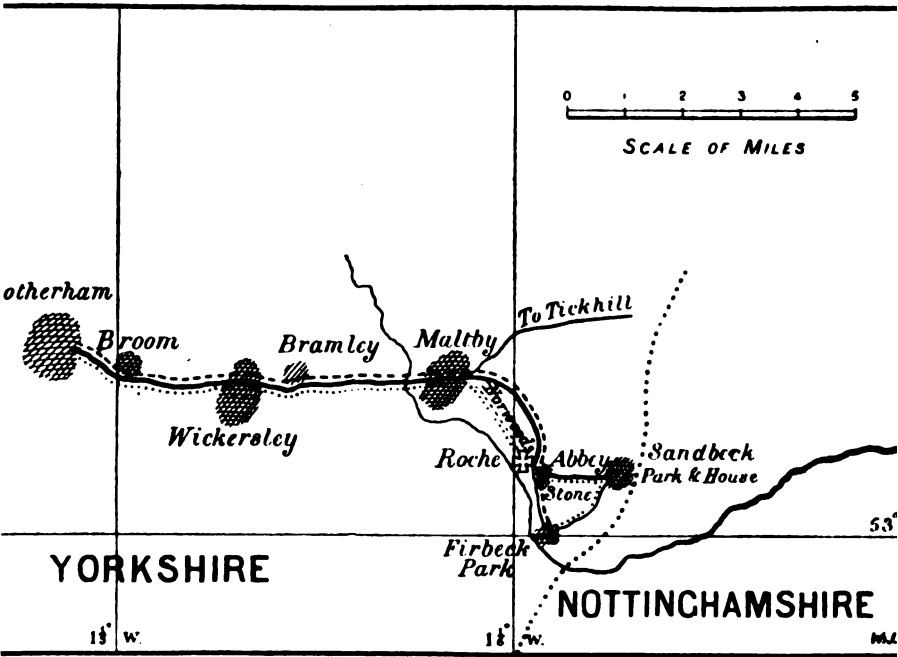
It was a most delightful and instructive ramble, and we hope that it is only the forerunner of others in the future.

JOSEPH WOLLMAN.

WILLIAM JAS. FLAMANK.

Thornhill Board School
Rotherham.

MAP OF THE ROUTE.



Outward Journey.....

Homeward „
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THREE SCHOOL JOURNEYS IN YORKSHIRE IN 1899.

3. TO CONISBOROUGH CASTLE AND THE COUNTRY OF ROBIN HOOD. BY BOYS FROM THE DONCASTER CORPORATION BOYS' SCHOOL.

DATE OF JOURNEY.

It had been arranged to take half a day during the second or third week in June, but owing to showery weather and other circumstances, the journey was postponed until the afternoon of the 13th July.

THE COMPANY.

consisted of 15 boys chosen from the Sixth and Seventh Standards.

ASSEMBLY.

The boys assembled at school at the usual time (2 p.m.) and their attendances were duly recorded.

PREPARATIONS.

As the weather for several days had been showery, each boy was advised to bring either a light waterproof cloak (if obtainable) or an umbrella; also to see that his boots were in good condition. A copy of "Ivanhoe," with selected passages marked for reference, and a bag in which to carry botanical or other specimens gathered on the way, were taken, and each boy was required to bring a note-book. The whole of the arrangements were carefully planned beforehand, and I made myself thoroughly acquainted with the district to be traversed.

THE JOURNEY.

Route.

Through the valley of the Don to Conisboro' (for the Castle), by way of Balby, Sprotboro', Levitt Hag, and what are locally known as the Cliffs or Craggs.

Reasons for selecting this route.

1. The district is interesting and attractive, and rich in botanical specimens.
2. The historic associations of Conisboro' Castle are such as appeal strongly to boys.
3. There is a good service of trains between Conisboro' and Doncaster.

NOTES ON THE JOURNEY.

BALBY.

(a suburb of Doncaster). The people originally termed "Quakers" held meetings here, under the leadership of George Fox. Origin of the term "Quaker."

THE VALLEY OF THE DON.

Once part of a great forest—a passing reference to Robin Hood. Its appearance in Scott's time as portrayed in "Ivanhoe." Changes undergone since that time. The River—its winding course—until recently formed the water-supply of Doncaster. Vegetation of the district.

SPROTBORO'.

(a quaint little village about three miles from Doncaster). Once the residence of the Fitzwilliam family. A very fine view is obtained from the bridge crossing the river, which the boys did not fail to appreciate.

The Church.

Ancient—style of architecture. There are a number of interesting relics inside the building, which, by kind permission (previously obtained) of the rector, we were enabled to see, including a stone sanctuary chair (there are only three in the country) and flags said to date from the Crusades.

The Hall.

Beautifully situated—the seat of the Copleys.

The Old Boat House.

Formerly an inn. Scott resided here while engaged in writing "Ivanhoe." Rebuilt within recent years.

The Old Flint Mill.

Now used as a corn-mill.

LEVITT HAG.

A limestone district. Quality and character of the stone. Lime-kilns—process of burning. Conversion of limestone (CaCO_3) into lime (CaO) by driving off carbonic acid gas (CO_2). Extent of the limestone rocks—their formation—fossils.

THE CLIFFS.

(an interesting wooded district). In passing through this district various matters of interest, both geographical and botanical, were touched upon. Many wild flowers were in full bloom. Tea, which had been previously ordered, was now served in the grounds of Conisboro' Castle, and afterwards the Castle itself was visited. (Tea over about 5.45.)

CONISBORO' CASTLE.

The name Conisboro'—ancient Britons called it *Caer Conan*, and the Saxons, *Conan Byrgh*. Commanding position on an eminence between town and river. Must have been a fortress of great strength. (A tour of inspection was made, and a brief history of the Castle given.)

The Moot.

A formidable barrier when filled with water ten feet deep—crossed by a drawbridge. Probable age and by whom built.

The Courtyard.

Walls surrounding it roughly constructed—chisel not used—probably Saxon in their origin. (Norman ideas had not yet been assimilated.)

The Keep, why so called.

Built of dressed stone—chisel used—massive—built by Norman (*cp.* wall of courtyard)—cylindrical form, supported externally by six square buttresses—entrance—has there been a movable bridge? Enormous thickness of the walls.

Interior of the Keep.

(I had arranged with the caretaker that we should not be disturbed by other visitors for the short time in which we were engaged examining the interior.)

Each story of the building was visited and points of interest dwelt on.

Walls at entrance 15 feet thick.

Guard room, or Armoury—circular aperture in floor, which is the entrance to the dungeon—deep well at bottom, but now empty.

Ascent to second story by flight of steps in the wall: this, probably, the principal apartment—handsome fireplaces in this and the room above.

In the third story is a small and elegantly ornamented chamber in one of the buttresses, in the Gothic style of architecture—various theories as to the use to which this room was put—probably used as a chapel. The three recesses in buttresses at the summit—extensive view obtained from summit.

Conisboro' is about five miles from Doncaster, and the return journey was made by the 7 p.m. train, the boys reaching their homes about 7.30.

REMARKS ON THE JOURNEY.

Throughout the journey frequent attention was drawn to the beauty of the landscape. Trees and flowers (many wild flowers were in bloom) met with on the way received attention. Various specimens were brought home. On the following Monday each boy was required to write out an account of the journey. These as a whole were very well done and showed that the boys had used their faculties of observation.

I enclose a copy of one of these essays. The weather throughout the whole journey was ideal and the country was seen at its best.

The bright faces of the boys and their intelligent appreciation of the object of the journey was sufficient recompense for all the trouble I had taken. The restraint of school was thrown aside

and conversation encouraged—though at the same time the boys were as completely under control as when in school.

The journey afforded a valuable opportunity for studying individual characteristics.

Unusual energy was displayed on all hands, and each little traveller seemed to feel that something real and tangible was being done, and that here was an opportunity not only to add to his own store of knowledge but also to give practical demonstrations of what he already knew. One boy gave us a description of his father's garden and explained why certain crops flourished and others did not. He touched on the process of "grafting," having on one occasion seen his father inserting shoots into a fruit tree.

Excursions of this nature are, I believe, of great educational value. Observation and intelligence are quickened and a desire to get to know and discover for self will manifest itself as the result. The children see things to which previously they were "blind." Interest is aroused; questions are asked; comparisons and contrasts are made—true education begins.

I may add in conclusion that the total expense incurred was under a sovereign, and was kindly defrayed by the Mayor of Doncaster (Councillor Birkenshaw), who is chairman of the School Committee.

The boys were not asked to contribute in any way, though several of them came prepared to pay both for tea and the railway journey home.



Course of journey indicated by dotted line.
Doncaster to Conisboro', 5 miles.

- | | |
|------------------|------------------|
| (1.) Doncaster. | (2.) Sprotboro'. |
| (3.) Levitt Hag. | (4.) Conisboro'. |

GEORGE S. HYDE.

Doncaster Corporation Boys' School.
November 11th, 1899.

COPY OF ESSAY WRITTEN BY ONE OF THE BOYS.

DONCASTER CORPORATION BOYS' SCHOOL.

Fred Elsey. Standard VI. Age 12.

School Journey.

ROUTE.—Our school journey was to Conisboro'. We passed by Balby, into Sprotborough, through Levitt Hag and the Cliffs to Conisboro'.

BALBY AND THE QUAKERS.—As we were passing Balby, our schoolmaster told us that George Fox (the founder of the Quakers) lived there, and many times he had been followed by a mob of people from Balby to Doncaster for preaching. These people would hoot at him, throw stones at him and try to insult him in every possible manner. This is the reason they were called Quakers: Fox had been put in court at Derby for preaching. When his trial came on, he looked around at all the people, who were laughing and sneering at him, and exclaimed, "You should all quake at the name of the Lord." Ever after that the believers in his doctrine were called Quakers.

THE VALLEY OF THE DON.—The Valley of the Don is very pretty now, but it is nowhere near as beautiful as it was a century or two ago. We learn, by what Sir Walter Scott says, that it was one of the most beautiful valleys in England, a beautiful forest stretched from Doncaster to Sheffield, and Robin Hood and his men used to roam about in it. The river used to be a clear stream, not muddy in the least, as the people used to drink the water. Now all kinds of filth are poured into it.

SPROTBORO' AND THE CHURCH.—There are many interesting things in Sprotboro'. Just before entering the village we saw the Hall. It is a fine old building, surrounded by beautiful trees. When we entered the village, the house where Sir Walter Scott wrote the famous book "Ivanhoe" was pointed out to us. When he was staying there it was a public house called the "Boat House," but so many people were drowned by getting drunk, that it had to be closed. Now it is a private house. Then we went to the church. It is not a large place, but it is an old one, and has many old things still in it. It was built about three hundred years ago. There is an old torn and tattered flag there, which is said to have been in the Crusades. In the south-east corner there are two monuments, one of the Earl Fitzwilliam and another of his wife. There is also a stone chair there, called "The Chair of Refuge." There are only three of them in England now. This was the use of them: When a man or woman had committed any crime, such as murder, and they knew someone was chasing them for doing it, they could go to the church and sit in it. Their opponent could not do anything to them while they were there. On the pulpit door, carved in the wood, are a pack of cards and a wine jug. They are in remembrance of Christ's Crucifixion day, when the soldiers were

playing cards and drinking wine. In the vestry there is an old chest with a very heavy lid, and a kind of stretcher, which was used to carry dead bodies to the grave.

LEVITT HAG. — Levitt Hag consists of a few houses and a number of limekilns. The limekilns send off a very disagreeable smell, which is carbonic acid gas. Some people take their children and hold them over the burning lime when they have the whooping cough, thinking that it will cure them. If they hold them too long it will kill them.

THE CLIFFS. — The cliffs are limestone rocks. The limestone that is burnt at the kilns is got from the cliffs.

THE CASTLE. — Conisboro' Castle is an old place, now in ruins. It is very different to what it was a century or two ago when it was occupied. Some of the outer walls have fallen down. The hollow where the moat has been is still there, but no water is kept in it. It is forty feet deep in one place, and it used to hold ten feet of water. It was built in 1685. We do not know who built it, but we know that it was built in two styles, the Saxon and the Norman. The outer walls are nine feet thick, built in the Saxon style. The walls of the keep are fifteen feet thick, built in the Norman style. The keep is a round one, about six yards in diameter. It is four stories high, but the fourth story has no roof on; it is said Cromwell blew it off. The bottom floor used to be dark, and when the castle was besieged the baron used to live in it. In the middle of the floor there is a dungeon with a well in it which used to supply the castle with water. The second floor was where the Baron used to live in time of peace. On the third floor there is the finest room in the Castle. It is not known what it was used as, but probably it has been used as a place of worship.

FLOWERS AND TREES. — On our way we saw many pretty flowers and trees. These are some of them: The wild convolvulus, campion, scabious, blackberry, bramble flower, privet, trefoil, coltsfoot, ragwort, knapweed, airiff, fools' parsley, wild tares, beech tree, ash tree, willow tree, elder tree, and many others.

THE SCHOOL JOURNEY (LONDON TO CATERHAM,
ETC.) MADE BY STUDENTS AT THE WEST-
MINSTER TRAINING COLLEGE. 1877-1900.

The following journey was first attempted in the year 1877. With one exception it has been taken in each of the subsequent years. A brief account of this "Journey" was given in a paper entitled "Subsidiary Aids to Instruction" which I read at the Educational Congress, South Kensington, 1884. The Queen's Scholars of Westminster Training College, sixty in number and divided into two groups of thirty, are each year conducted over the journey. The main object of the ramble is to present to these future teachers a model upon which they may base similar journeys. Teachers who have profited by the experience thus gained have planned for themselves and have carried out similar journeys over different areas of England.

The following is only an outline sketch of the journey. For a full account the reader is referred to an illustrated pamphlet I have just published entitled "The School Journey" (Simpkin). The statements about to be made may be briefly arranged under the following headings, viz., (1) Class Preparation, (2) The Railway Journey, and (3) The Walking Tour.

A.—CLASS PREPARATION.

I cannot too strongly impress the importance of a thorough preparation of the class before attempting the journey. All the members must be imbued with a common aim. The desire to observe and completely understand a few well-marked phenomena must be aroused before the actual outdoor effort is begun. Otherwise divided interests will tend to weaken the field effort and to lessen the general educational effect.

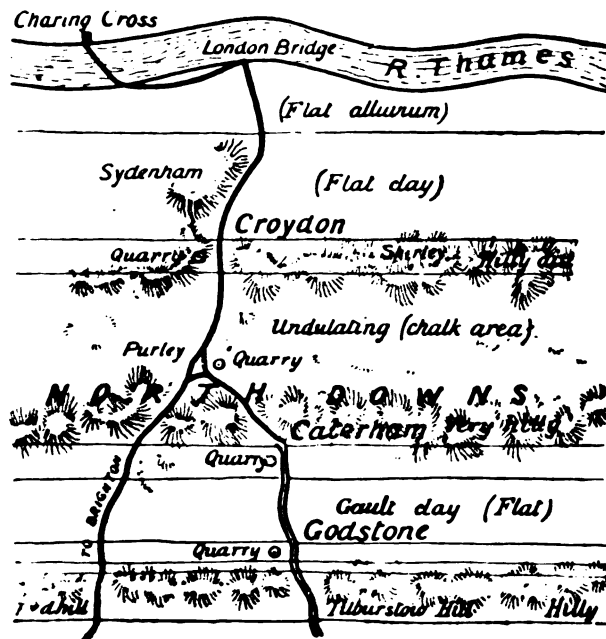


FIG. 1.

The above map of the route from Charing Cross to Tilburstow Hill is, in the first instance, thoroughly mastered. An ordinary lesson in geography, in which the succession of physical features is graphically described, is given. The map is studied until it can be reproduced from memory. The degree of success with which the student can read a map varies much. Some appear to have the power to produce in their minds a very good outline of the natural phenomena—plain, hill, range, valley, etc.—and they immediately recognise each feature in the field when it is seen. This power to recognise a striking natural feature in the midst of much variety of geographical detail gives great satisfaction to the learners. They are encouraged in their future attempts to understand the geography of a new district. Other pupils manifest less ability. The difference is largely due to early experience. Those who have lived in the dales of Yorkshire or Derbyshire, or in the picturesque scenery of Devonshire and Cornwall, are, as a rule, most apt. A few "journeys" in every school, properly planned and conducted, help to make this difference of ability less marked. The outdoor effort soon tends to make the class-room study of the map much more realistic and hence much more interesting and profitable.

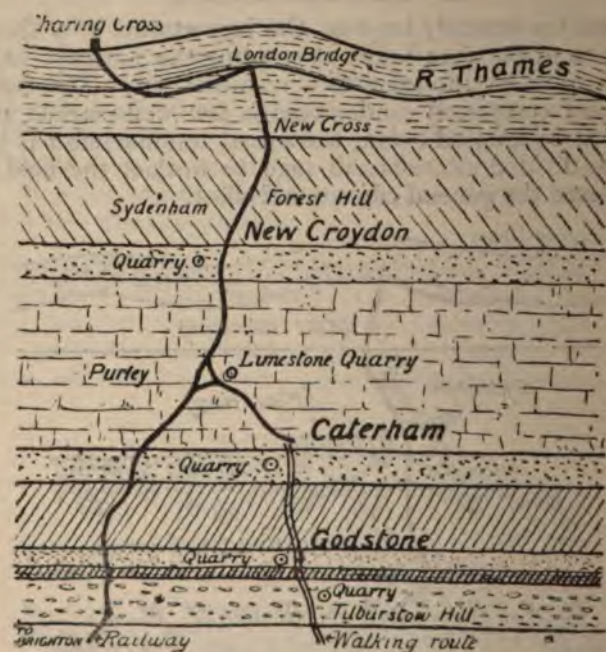


FIG. 2.

The plan of the district, Fig. 2, is next presented. This plan is drawn in different colours. The colours used bear as close a resemblance as possible to the colour of the rocks found in each

district. Thus olay districts are marked in blue chalk; gravel in pale brown; chalk in yellow, etc. When this plan has been carefully constructed and the rocks indicated have been identified by means of specimens taken from the school museum, the pupils are asked to compare the map with the plan. The following general truths become at once apparent, viz. :—

(a) That variation in surface contour is usually accompanied by variation in rock structure. For example, the three hill ranges marked on the map are connected directly with changes in the rock structures of these respective ranges, *e.g.*, the hills beyond Croydon with the appearance of the Tertiary sands and gravels; the North Downs with the chalk rocks; and the ranges at Tilburstow with an appearance from beneath the gault clay of the sands and sandstones of the Hythe beds.

(b) That some rocks tend to weather into flat districts, whilst other rocks when they spread over the surface become gently curved. For example, all clay areas tend to become flat, whilst limestone and sandstone districts become undulating and hilly respectively.

(c) That *strikingly* undulating and picturesque areas (as at the village of Caterham) derive their variety of outline from the presence of a considerable variety of rock structure in close proximity.

The chalk hills near Caterham village are capped by the gravels and sands of the Croydon area. The tops are thus preserved whilst only the sides are subject to weathering. Thus steeper hills are the result.

The above comparison of "plan" with "map" brings out the truth that geographical detail can only be thoroughly understood by means of a slight acquaintanceship with the geological structure of the district. This knowledge need not be very profound, but, so far as it goes, it must be correct. The material for the necessary geological knowledge is to be found in the "Memoirs" published by the Geological Society of England, and a fairly full summary, written in a popular style and fully illustrated, is to be found in Professor Ramsay's Book entitled "The Physical Geography and Geology of Great Britain."

Vertical Sections and Plans.—With a class of fairly intelligent pupils and a district of regular and simple geological structure a successful attempt may be made to find reasons for the changes of rock material indicated in the map and plan just described.



FIG. 3.



FIG. 4.

A glance at the section, Fig. 3, is sufficient to show the basin-like arrangement of the strata beneath London. If the upper line of this section be followed from the Thames to the North Downs at Caterham the same succession of rocks as those on the plan, Fig. 2, will be passed over. And, if this upper line be followed until Tilburstow Hill is reached, a further series of rocks come under notice, viz., (1) the greensand, (2) the gault (clay), (3) the Folkestone sand, and (4) the Hythe beds. The examination of this section enables the pupil not only to determine the order in which each structure of fresh rock material comes into view, it also enables him to recognise the still more important truth, viz., that the entire series of different strata which appear on the surface and which give variety and beauty to the southern surroundings of London, are entirely due to the bending of the strata beneath and near London into this basin shape. Were the strata horizontal, with, for instance, the London clay as the uppermost member of the series, the surface aspect would resemble (throughout the entire area) that of the flat district between the Crystal Palace and Croydon.

As it is intended to apply the knowledge gained during the actual tour in explanation of geographical features of neighbouring and more distant districts, a further section, Fig. 4, is now examined. The dotted lines show the connection that existed ages ago between the strata followed in the previous section with the same set of strata now found thirty miles to the south in immediate connection with the South Downs. An attempt is made, in imagination, to bridge over the old Wealden area by replacing the strata which have disappeared in consequence of long ages of weathering. It is now recognised that in the distant past there were not two ranges of chalk downs. One range much higher than either of the present Downs then existed. A very puzzling geographical phenomenon (viz., that of the flow of the Mole and Medway through the North Downs, and that of the Arun and Ouse through the South Downs) can be accounted for by means of the knowledge which the section illustrates. This phenomenon will be mentioned and explained in the field.

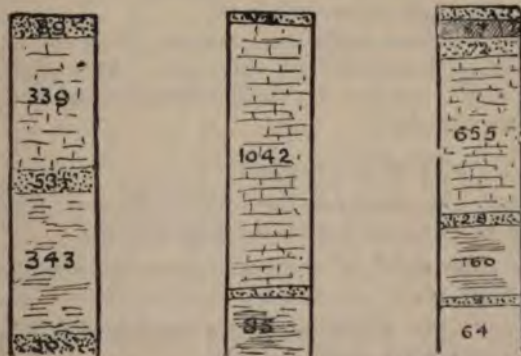


FIG. 5.

The three well-sections here shown should be noted. They prove the existence, beneath London, of the different strata, and one (that at Caterham) shows the presence on the top of the chalk of over 80 feet of sands and gravel. This latter fact accounts for the preservation of the hill-tops round that beautifully picturesque locality.

The pupils who have thoroughly mastered these maps and sections will be able to understand the instruction subsequently given in the field. Without this preliminary instruction, surface appearances may be noted, the variety and charm of the scenery may be enjoyed, but the deeper meaning, *i.e.*, the causes giving rise to the observed geographical phenomena, cannot be understood.

B.—THE JOURNEY BY RAIL.

From Charing Cross to Caterham the journey is by South-Eastern Railway. This portion of the excursion may be made of considerable educational value if the pupils have been prepared as suggested in the preceding chapter. It will be necessary, furthermore, to provide each scholar with the maps and sections already made familiar, together with an abstract of the main features to be observed along the route.

This abstract should be somewhat as follows:—

From Charing Cross to New Cross:—

(a) Notice the low and almost monotonous level of the country, the railway running almost continuously over arches above the level of the houses.

(b) Observe the shipping on the Thames and in the Docks apparently at a higher level than the houses.

(c) Where possible catch a view of the soil and notice its dark rich colour.

(d) From (b) and (c) infer that before the Thames was embanked it would overflow these low-lying districts.

(e) Connect the rich alluvial deposits with garden produce for the supply of the town markets.

A passing reference suffices to connect the embankments with the Dutchmen who undertook the work. An association may at the same time be made with similar districts in Holland and in our own Fen country.

From New Cross to Croydon:—

(a) Observe the change in the level of the country as indicated by the railway enclosed between embankments.

(b) Notice the width of the cutting on either side, as at Honor Oak Park Station.

(c) Connect this width with the tendency to slip, observed whenever cuttings are made in clay.

(d) Observe the efforts of the railway companies to prevent the clay filling in the cutting—by walls and trenches filled with chalk.

(e) If the clay be left without these protecting walls the railway cuttings would fill up. The tendency of clay areas to become level and plain-like is thus illustrated.

(f) After leaving Forest Hill the district through Norwood Junction to Croydon displays a distinct and very extensive clay plain.

From Croydon to Caterham:—

(a) Notice the change in the appearance of the country immediately after leaving New Croydon—from flat to hilly, the railway embankments becoming almost vertical.

(b) Catch a view of the gravel quarry on the right, and the patches of almost pure white sand along the embankment on the left.

(c) After leaving South Croydon, look backwards on the left-hand side of railway and see the beautifully wooded and steep gravel-topped hills of Addington and Shirley. These must be connected with the change from clay on the north of Croydon to the sand and gravel on the surface south of Croydon.

(d) From South Croydon to Caterham the country again changes its surface aspect. No steep hills, no level plains—the entire country becoming gently undulating. Look into the fields and try, if possible, to find a square yard of perfectly level land.

The above enumeration of things to be noted, arranged somewhat in tabular form and unaccompanied by views or diagrams, may strike the reader as little likely to impress the young traveller. It should be observed, however, that the carefully prepared pupil has already in his class-room exercise formed a series of pictures of the country to be passed over. These pictures are purely mental, being arrived at mainly by processes of imaginative effort. The interest with which the pupil compares his mental images with the observed facts is very striking. Whilst passing over the housetops towards New Cross he manifests impatience at the delay in arriving at the slipping clay. He is particularly impressed when a recent landslip shows how determined the clayey rock is to undo the work of the railway contractor. When the hills beyond Croydon are reached his delight at seeing the well-wooded sand and gravel slopes is intensified by his effort to connect these with similar sands and gravels more than twenty miles away on the north of London. When, furthermore, he turns to his sections and realises the truth that the sands and gravel rest everywhere beneath the streets and houses of London and are only hid from view by the thick covering of London Clay, his pleasure at seeing these surface representations of widely extended rocks is marked. The open breezy down between Croydon and Caterham affords a sufficient contrast with both districts over which he has previously travelled to awaken interest and maintain it.

The contrast between the attitude of pupils thoroughly prepared for the journey by class-room instruction and a party

of youths travelling on an ordinary school-treat or excursion with no preliminary instruction is most marked. Even an ordinary map placed in the hands of a youth when taking a railway journey adds materially to the interest he takes in the country over which he travels. When, however, a youth is so instructed that he is able to anticipate the aspect of the country before it comes actually into view, and when, furthermore, he has the satisfaction of seeing how nearly his imagined picture corresponds with the original, a fresh and very inspiring interest is awakened. This interest does not exhaust itself in the pleasure of the school journey. His after reading of geography and of travel becomes much more real, and the confidence he feels in the imaginative effort accompanying his reading is a decided gain.

C.—THE WALKING TOUR.

The walking tour completes the school journey. It may be suggested that instead of completing the journey the walking tour ought to begin it, and that class-room explanation should follow. This latter plan appears well in theory. In practice, however, it is found that natural phenomena, as these are viewed in the field, are so varied and complex, and their arrangement is on so vast a scale, that the observer is in great danger of becoming either bewildered or disheartened. If a group of scholars, having no previous instruction, be taken to the top of the South Hill overlooking the village of Caterham, they will view the landscape before them with intense delight. "Grand, isn't it?" says one. "Nothing finer out of Derbyshire," says another. Such expressions as these will be repeated in various forms, but, beyond these little speeches, very little will be heard. The pleasure felt in allowing the eye to rest upon a varied surface outline of great expanse, upon hills wooded to their summits, and upon dales mantled in richest verdure, is all-sufficing. The pupils' language betrays their satisfaction. They resent rather than desire the teacher's instruction. How different the behaviour of youths who have brought with them the knowledge detailed in previous paragraphs! They rest for a few moments on the hill-side and quietly enjoy the panorama before them. They are not content, however, with simply seeing and enjoying. "Why this change from the flat aspect near Norwood and the regular undulations of the grass covered 'downs'?" is the first enquiry. In reply, the teacher points to a high shaft on the top of the opposite hill. Immediately below is the boring of an artesian well which supplies the valley with water. The plan of the boring (Fig. 5) is examined. It is there shown that over 80 feet of sands and gravels cap the summit. The hill on which they rest has a similar gravel top. The surrounding hills are all similarly capped. It is now the teacher's turn to ask a question. It takes the following form: "You remember the hills you saw at South Croydon. They were formed of sand and gravel. The gravel prevented the tops of those hills being washed away. The

same sand and gravel are found on the tops of all the surrounding hills. What is the cause, think you, of these hill-tops being preserved whilst their sides are worn into the deep valleys you see before you ?" The scholars have little difficulty now in connecting the height of the hills, the steep slopes into the valleys, and the heavily timbered summits of the hill-tops, with the presence there of the sand and gravel. The association of variety of rock structure with the variety in slope is now firmly made by the class. It will prove a principle capable of application in almost every locality they may visit. If asked to enumerate other hill structures near London the same truth is illustrated.

One mentions "Hampstead Heath." "Yes," says the teacher, "the top of the hill at Hampstead is protected by a sandy deposit called the Bagshot beds."

Another pupil suggests "Beddington." Here again an outlier of sand is the cause, but the sand in this case is that which the scholars saw in the cutting near Croydon, viz., the Thanet Sand.

A third suggests "Shooter's Hill." Again a gravel outlier rests on the top and prevents the hill being worn down.

Lastly, a pupil suggests the high land of Clapham, Wandsworth, and Wimbledon Commons. In each case, it is stated that the level of the Common has been preserved by a gravel deposit—the gravel on the Commons being a deposit of the river when it flowed at a much higher level.

It may be objected that the matter now being taught does not come in the journey, and that other matter immediately under the eye of the scholar is being overlooked. Just so. The skill of the teacher is best shown in fixing the attention of his class mainly upon those features in the journey capable of widespread application. Scholars rambling unguided may observe more detached matter than those who are under skilled direction. The former, however, gain less knowledge than the latter. Isolated and detached facts are almost valueless. *A few truths strikingly illustrated, and capable of wide application, should be taught in every journey.*

The Journey over the Chalk Downs and its Lessons.—The journey for the next mile is over the chalky Downs. The gentle undulations of these treeless areas at once strike the attention. This feature is impressed by the contrast made with the scenery at Caterham (distinctly hilly), at South Croydon (hilly), and at Norwood Junction (flat). Asked whether they have seen similar surface areas in other districts, the pupils are ready with abundant replies. Brighton, near the Dyke and race-course ; Eastbourne, near Beachy Head ; Margate and Ramsgate, near the North Foreland ; Dover, at Shakespeare's Cliff, answer different scholars in turn. They are ready, furthermore, to remind the teacher that in all cases the appearance is associated with the chalk subsoil. The teacher now takes the scholars further afield and tells them that Salisbury Plain in the south is in appearance like the view before them ; that the Downs finely developed in the neighbourhood of Hunstanton and spread over

the North of Norfolk, are also of the same surface aspect; and that the Lincolnshire and Yorkshire Wolds present the same appearance, and for the same reason. A stretch of imagination aided by a diagrammatic sketch enables the class to realise the appearance of the mountain masses forming the great axis of the six Northern Counties. They are told that the highest portions of the extended range are a limestone somewhat harder than the chalk. The likeness, however, between the surface outline of the Downs and Wolds in the south and east of England and that of the Pennine slopes is very marked. The wider general truth is now within reach of the class, viz., *that Limestone areas weather so as to present a more or less monotonously curved surface outline.*

Before leaving the Downs a further and closer association existing between the above-mentioned Downs and Wolds is attempted. Hitherto the association has been twofold, viz., that of surface outline and that of composition. An attempt (and with fairly intelligent scholars a successful one) is now made to show that the series of Downs and Wolds have a common origin. A brief statement must suffice to show how this is done.

(1) The Sections (Figs. 3 and 4) are again examined, as are the well-borings (Fig. 5). The well-borings afford direct evidence of the extension, in basin shape, of the chalk beneath London.

(2) The chalk hills between Barnet and Hitchin (Middlesex Heights) are now seen to belong to the same hill matter as the Down on which the observer stands. Thus the two hill ranges nearest to London (separated when treated as merely facts in geography) are seen to be identical in origin.

(3) The Hills in the North are now traced on maps through the East Anglian Heights to Hunstanton. They are there shown to form a basin beneath the Wash exactly like that beneath London. They reappear in Lincolnshire and Yorkshire as the Wolds.

So far the scholar is able to connect in origin such widely separated geographical facts as the North Downs, the Chiltern Hills, the East Anglian Heights, and the Yorkshire and Lincolnshire Wolds. A similarly close association may also be made between the terminating promontories of these hill ranges, viz., Flamborough Head, Hunstanton Cliff, and the North Foreland.

(4) Looking southward from the highest point of the journey, viz., from Tilburstow Hill, the pupil may (on a very clear day) descry the rounded outline of the South Downs. By reference to Fig. 4, he builds up the great dome of chalky matter which once bridged over the distance between the present North and South Downs. When, by an effort of imagination, aided by diagram, the pupil builds afresh the one great ridge (dome) of chalk connecting the North and South Downs, it is not difficult to explain the peculiar action of the rivers which now appear to

break through these chalk ranges. They are simply continuing to flow in their old ravines made ages ago when their sources were at a higher level and at the summit of the dome-like ridge which the streams have done their best to destroy.

(5) Another basin curve of the chalk beneath Hampshire and the Northern portion of the Isle of Wight connects the chalk range which crosses the island from Culver Cliff to the Needles with the South Downs.

The above associations enable the scholar to make the most fruitful connections between all the most prominent geographical features in the entire South Eastern and Eastern Counties of England. This district includes the area east of a line drawn from Portland Bill to Flamborough Head.

The Journey from the Downs to Tilburstow.—Four different rock strata are crossed, and each yields its distinct effect on the surface outline.

i. The small undulation of greensand rests at the foot of the Downs.

ii. The gault clay affords a walk of nearly a mile over an almost perfectly level but very fertile district.

iii. The Folkestone and Hythe sands with their iron bands and flinty chert resist weathering. A steady but continuous climb brings the pupils to the top of Tilburstow Hill, from whence they overlook the Weald, the Wealden Heights, and the South Downs.

In each of the above-named areas the pupils are encouraged to connect what is observed with its cause, and they are furthermore induced to apply the first-hand knowledge they acquire in explaining phenomena in other areas where similar conditions are found. Space does not permit a fuller statement in this paper.

The above is an account of work done for English teachers in English schools. As both aim and plan of the "journey" depend to a considerable extent upon the material presented by any chosen locality, it may be that an account of home rambles may prove of greater service than accounts of similar work done abroad. It remains for me to add that I have little regard for school rambles which do not demand considerable concentration of effort on the part of the scholars. A pleasant outing is not sufficient. The annual School Excursion is for pleasure chiefly, the School Journey must be a serious though pleasant form of intellectual effort.

In the Departmental Blue Book of 1898-9, Sir H. Evelyn Oakeley reported as follows:—

"The study of geography at this College (Westminster) has for twenty years been supplemented by a 'School Journey' from Croydon to Godstone, under the guidance of the Master of Method (Mr. Cowham). Before it, maps and plans of the district are drawn, and the general arrangement of the geological formations is studied, viz., the flat clay district of Norwood, the undulating chalk areas beyond Croydon, and the picturesque

district of Caterham, due to the presence of sands and gravels in the midst of and upon the chalk. The value of thus connecting the facts of geography with their causes, and of exercising judgment and reason in place of a mere remembrance of names, is obvious. This is the best way to teach geography, and I am glad to learn that some teachers who have been at Westminster have taken groups of their scholars in a similar manner."

SUMMARY OF ADVANTAGES OF THE "SCHOOL JOURNEY."

(1) Accurate first-hand knowledge of a given limited and readily accessible area is gained. This first-hand knowledge—full, accurate, and permanent—gives a possession of high value for purposes of gaining clear notions of districts which cannot be similarly visited.

(2) The power to observe is quickened, and, at the same time, ability to concentrate effort upon a few well-defined objects in the midst of great profusion and variety of material is gradually acquired.

(3) A few truths, strikingly illustrated and capable of wide application, are established in every journey. The accumulation of many isolated facts is avoided.

(4) The power to apply knowledge in possession to the acquisition of further knowledge provides both a means and a stimulus for the exercise of self-effort.

(5) Besides being of direct service in the acquisition of reliable knowledge, the participation in a few "School Journeys" enables the pupil to use his after-school rambles and excursions rationally, and with pleasure to himself and others.

(6) In some accounts it has been deemed advisable to limit participation in the "School Journey" to those deserving of prize or distinction. No such limit is advised here. Frequently the dull and indifferent boy in school and bookwork proves both active and interested in the outdoor effort. This activity aroused by the outdoor exercise reacts upon the scholar's effort in the school.

(7) Lastly, the social and æsthetic advantages are not overlooked. A love of nature is engendered. Teacher and scholar display mutual sympathy and regard. School work is intellectually benefited and school life is morally elevated.

I should like, in conclusion, to state that whilst over a thousand English teachers and some Principals and Tutors of Training Colleges and School Inspectors have accompanied me over the above ramble, I have had no associates who have taken an interest in the Journey deeper than that which was shown by a party of Evening Class Students, many of whom were working men.

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A PLEA FOR A GREAT AGRICULTURAL SCHOOL.

I.

GOETHE has embodied his views on education in his *Wilhelm Meister*. In it culture is set forth as the full and harmonious development of all the powers of body, mind, and heart, not only in preparation for, but also in the actual performance of, the work of life. As the late Sir John Seeley has forcibly pointed out,* the idea which pervades the book is that the life of a man is itself the highest work of art. This seems to have been the secret of Goethe's own activity. Life itself is worth living and worth any amount of effort and study to enlarge and refine, to elevate and bring to perfection.

It follows from this that the choice of a man's lifework is everything to him. It should be of such a kind as to call forth all his best powers. It should, in itself as well as in its results, be a joy and a delight to him. It is, therefore, of the highest importance that in his early training there should be means for ascertaining the main bent of a youth's nature and his special capacity. It should deal with all his faculties, it should awaken every side of his character, and afford room for the growth of what is most peculiarly his own.

A scheme of education, which will provide this training, is sketched by Goethe. It is an imaginary one; he is bound by no limits of space, material or finance. It is not a school, or college, but a *province*, devoted to education. His description begins thus: "At the very entrance they found themselves in a district of extreme fertility; in its soft knolls, favourable to crops; in its higher hills, to sheep husbandry; in its wide bottoms, to grazing. Harvest was near at hand, and all was in the richest luxuriance; yet what most surprised our travellers was that they observed neither men nor women, but in all quarters boys and youths, engaged in preparing for a happy harvest, nay already making arrangements for a merry harvest home." We have hints that room was found in this spacious region not only for the various processes of agriculture, but for the training of wild colts—the arts of sculpture and painting and the trades akin to them—mechanism and mining—while with these practical occupations was combined the study of languages, poetry, and music.

Carlyle, in his Rectorial address at Edinburgh, referring to this, as he calls it, "Glorious, far glancing specimen of a non-vocal, or only partially vocal, kind of school," which Goethe has sketched

* "Goethe, reviewed after 60 years," by J. R. Seeley, Litt.D. Chap. viii.

says: "Very wise and beautiful it is. It gives one an idea that something greatly better is possible for man in the world. I confess it seems to me it is a shadow of what will come, unless the world is to come to a conclusion that is perfectly frightful; some kind of scheme of education like that, presided over by the wisest and most sacred men that can be got in the world, and watching from a distance—a training in practicality at every turn; no speech in it except that speech that is to be followed by action, for that ought to be the rule as nearly as possible among them."

This ideal of Goethe's, which so captivated Carlyle, may be of some service to us now, when on all sides efforts are being made to revolutionise education in the direction of practicality.

Its main feature is the wide and varied scope it gives to the activity of the pupils—as wide and varied almost as life itself. This is gained for it chiefly by its having an agricultural basis. For agriculture is, after all, the most natural and original form of human activity, and, in the multiplicity of its pursuits, an endless variety is found, and all other human occupations are in close touch with it. It seems strange that this should have been so long forgotten, and that the life of our schools should have been so completely divorced from the land, and that the experiences of boyhood, except in the playground and in holiday time, should have been cut off from the countless ministrations of Nature, which throng the garden and the field, but are left behind at the door of the schoolroom.

An agricultural environment is thus the essential of Goethe's scheme. It alone can afford scope for the free development of all a boy's powers, and thus give opportunity for the discovery, by himself and his teachers, of the true bent of his nature. If, therefore, we were to take Goethe as our guide, we would, in the interests of the education of the rising generation, as a whole—not only of that part of it who are going to be farmers—endeavour to set up a large agricultural school, giving room for that complete training of body and mind, in natural grooves and by natural methods, which he so strongly insists on.

There is, however, a very large number of the youth of this country who are from their earliest years marked out by their parentage, their early tastes, and the whole drift of things around them, to be farmers. I will not now speak of the children of farm labourers, whose present training and future lot undoubtedly deserve the gravest and tenderest consideration. They form the rank and file in the great agricultural army, who dominate nature for us and bring back, as the spoils of their warfare, food and raiment for us all. I speak rather of those who are to be their officers—those young farmers under whose orders they are to fight the battle, and upon whom success or failure in the struggle will to a great extent depend. From a long experience I can say that, at present, these form one of the worst educated classes in the community. The children of labourers have now to attend Elementary Schools, and the compulsory clauses of the Education Act are enforced in their case to prevent any breach

of the law, but farmers frequently do not like to send their sons to the Elementary School. They sometimes hire a governess, who is generally without any recognised qualification for teaching, and a great part of whose time is occupied in giving assistance in multifarious ways to the farmer's wife. They sometimes send their boys for a year or two, or, perhaps, for a term or two, to the nearest secondary school, and thus evade the law, which, indeed, they themselves, as members of School Boards, may have to administer. If a boy comes to the best school in the world at the age of thirteen as ignorant as a well-taught child of seven, it is not possible to make him more proficient by the age of fifteen than most boys are at nine. It follows from this that the lads return to their fathers' farms almost wholly uneducated. In a few years the complicated business of the farm passes into their hands; and is it to be wondered at that, in spite of diligence, energy, and honest effort, their total want of mental training and mental resource should lead to a wearisome struggle with difficulties they cannot estimate, and therefore cannot grapple with, and to which they ultimately succumb? There are, of course, numerous and brilliant exceptions to this rule, and these it is as important to notice, for, in spite of bad times and losses and low prices, the men who have been fairly educated are generally those that weather the storm, and if not in one way then in another, manage to make the two ends meet.

At the present moment, in the minds of County Councillors throughout the whole of Great Britain, there is an uneasy sense of responsibility. A great duty has been laid by the nation upon their shoulders—that of spending a large sum of money in the best possible way for the advancement of what is called "technical" education. One of the largest industries in the kingdom, and one which, in its influence upon society in general, is more important than all other industries put together, is in a depressed condition. It is felt that, if it be possible to assist agriculture efficiently by an expenditure of the grant in the direction of agricultural education, there could not be a more satisfactory way of discharging this important public duty. There is, therefore, a widespread desire to discover the best way in which this can be done. A Royal Commission has also recently inquired into the question of secondary education in general, and the Government are attempting the organisation of our manifold educational agencies. With County Councillors, Her Majesty's Lords in Council, and all educational authorities, I would plead for a consideration of the claims of that large class of farmers' sons whom I have described.

These boys will, in a few years, be the managers of a capital, which, in the aggregate, is enormous, and is of such a kind that it is of the utmost importance to the nation that it should be managed in the best way. All the land, and all the cattle, sheep, and other live stock, all the agricultural machinery and plant, and all agricultural labour, speaking roughly, will be under their control. The money value of this would be a gigantic

sum, but this would be no measure of the difference to the life of the people between its being managed well and managed ill.

Are not the brains and character, and aims of these boys, then, a matter of national concern? No one who considers the subject at all will be likely to deny this fact: but all will impatiently ask how it is to be dealt with.

The first thing to do is to put the law in force, and see that they receive, either in the Elementary School or by some other means, a good elementary education before the age of twelve or thirteen. It is a lamentable fact that a law of such importance should be broken with so little justification as in this instance. This alone would be an immense gain, and would alter the conditions of the problem before us.

With regard to what should be done with these boys after the age of twelve or thirteen, supposing their education up to that time to have been properly attended to, it must be noticed that there are many gradations among them.

There is a comparatively small upper fringe of well-to-do farmers who might be able and willing to extend the education of their sons so far as to enable them to receive an ordinary general education like that of the public schools, and even, perhaps, to go to one of the Universities, and then to an Agricultural College. Some might be willing to give their sons an ordinary Grammar School education up to the age of seventeen, and then send them to an Agricultural College for two or three years. The number of farmers who would or could for a moment entertain either of these ideas is exceedingly small, and their needs are sufficiently met by the schools and colleges already in existence, and the Agricultural Departments recently attached to some of our Universities and University Colleges.

Again, there is a lower stratum of very small farmers, who would never think of giving their children more than the minimum of education required by the State, and who would be content that their sons should share whatever provision might be made for the instruction and training of those of the agricultural labourer.

Between these two classes, however, come the vast majority of farmers. A fact about them, which it is foolish to ignore, is that they will never dream of extending their sons' education beyond fifteen, sixteen, or, at the very utmost, seventeen, and that therefore it is worse than useless to build colleges for them. If you send a boy of fifteen to a college, he mixes with youths two, three, or more years older than himself, who are on the verge of manhood and think themselves men, and, in the majority of instances, the boy's character is in this way injured for life.

The question before us, then, is: In what kind of school would it be well for a boy of the age, say, of thirteen, who is going to be a farmer and who has already received a fair elementary education, to pass the next three years of his life.

In his future daily work he will be brought into contact with nature at every turn. The natural sciences, therefore, ought certainly to be his chief study. His life is to be one long course

of dealing with the soil, with the air and water, with force, with green herb, with fowl, and cattle, and creeping thing. Moreover, his action upon these has one object, the production of food and clothing. Thus a course of study and practical training is marked out for him of the most varied character. He has the advantage of bringing to his scientific studies a strong practical interest, an actual and immediate application of their principles to the procedure and life of the farm.

The long list of natural sciences, beginning with physics and chemistry, including, perhaps, bacteriology, and ending with political economy, which throw light upon the work of a farmer is sufficiently startling and has given many a solid English agriculturist a distaste for the whole subject of agricultural education. He might very well say, "The attempt, in a few years, to give my son a smattering of all these sciences will certainly enfeeble his mind and, instead of creating an interest in his work, will disgust and bewilder him." This is sensible and true; but, for all that, the life of a farmer touches nature at all these points, and a clear knowledge of the conditions of his own work must include much that these sciences teach.

The difficulty and a clue to its solution are, I think, referred to by Goethe in one of his conversations with Eckermann. "We retain from our studies only that which we practically apply." "Altogether they teach in academies far too many things and far too much that is useless. Then the individual professors extend their departments too much—far beyond the wants of their hearers. In former days, lectures were read in chemistry and botany as belonging to medicine, and the physician could manage them. Now, both these have become so extensive that each of them requires a life, yet acquaintance with both is expected from a physician. Nothing can come of this; one thing must be neglected and forgotten for the sake of the other. He who is wise puts aside all claims which may dissipate his attention, confines himself to one branch, and excels in that."

There is so much for a farmer to know that the utmost care should be taken that no time is wasted in teaching him what is unnecessary.

I believe that in each science bearing upon agriculture there are a few great principles, which may without difficulty be mastered by a boy, and their application to agriculture may be at the same time clearly shown and verified by practical demonstration and actual experiment. It is absurd to make a farmer a chemist or a botanist or a physiologist, but the laws of nature in soil and plant and animal are to be his friends or enemies throughout life, and it is essential, if he wishes them to be friends and servants, that he should understand their ways. It will not be necessary for him to study the reactions of all the elements, or be familiar with the properties of the enormous number of compounds, organic and inorganic, that text-books of chemistry are filled with. The substances with which a farmer has to deal are comparatively few, and their properties may be illustrated by experiments which will at the same time make

him familiar with the simple and beautiful laws of chemical combination, upon which the whole science is built.

If Goethe is right in saying, "We retain from our studies only that which we practically apply," then this method of teaching science may be found to be by no means the least successful. Its special bent, instead of being a cause of weakness, may be a source of strength. Treated in this way, chemistry ought not to be a bugbear to the farmer, but his most valuable ally. He need not be afraid of it, as too difficult or bewildering; for every lesson in it will be an explanation of a universal law, and the clearing up of innumerable difficulties, that would otherwise beset his path through life.

What I have said of chemistry is applicable to the other natural sciences that bear upon agriculture. It is not necessary to be proficient in them throughout their full extent; but it is essential that he should know their principles and how those principles ought to affect his own practice.

If we keep this in mind, then, there is nothing more fascinating than the course of study which would appear most suitable for the future farmer to embark in. He must study the soil, its history, the influences that affect it, and the changes that can be produced in it, and in the simplest way these enquiries will lead him into what we call by the somewhat forbidding names geology, physics, and chemistry. He must become acquainted with the plants that the soil produces. The useful cereal and the injurious weed and fungus have their own interest for him, and the laws of vegetable growth and reproduction will have, for him as for all who study them, that intellectual charm which makes botany so attractive. His knowledge of animals must be intimate and intelligent, not only of those which he rears and feeds, but also of those more minute creatures that prey upon his crops or bring disease into his flocks and herds. Thus the main teachings of animal physiology must be familiar to him, and hygiene, or the science of health, will be to him of the utmost importance, not only in reference to his own stock, but in reference to the effect that attention or inattention to sanitary rules, in the treatment of stock and in the dairy, may have upon the health of the community.

Thus far, his course is a study of the material, animate and inanimate, that he will have to deal with in after life. But, for efficient dealing with this material, other knowledge will be necessary. A sound grounding in elementary mathematics should be the preparation for such a study of the principles of mechanics and hydrostatics as would enable him to understand machinery and the utilisation of water-power and steam. This mathematical knowledge should also be the preparation for the practice of mensuration and land surveying, plan-drawing and the estimation of quantities and prices of materials; and also for a thorough study of the business aspect of the farm and book-keeping.

If these studies were carried on in close proximity to farm-life, it would be possible to combine with them a general study of the complex work of a farm, the nature of each operation,

the number of men and horses and the kind of implements to be employed, the rotation of crops as affecting the distribution of work and the supply of food for stock, the management of the different kinds of stock, their diet, a comparison between the total cost of production of each kind of crop and its selling price, and the economic aspect of the whole.

I should not, however, advocate the above course of study unless it could be combined with actual manual labour. No study of an operation can be of much use, unless one takes part in it oneself. The farmer, whose training we are describing, must be more or less a worker, and his school life ought to afford him opportunities for the training of those muscles and the acquiring of that manual skill which he will have to use afterwards. This manual work should be of a very varied kind. In the carpenters' shop and smiths' shop, under careful teachers, he might learn the use of the various tools in wood and iron work, and some knowledge of welding and soldering, which would undoubtedly be of service in his after life. Each boy, according to his age and strength, could have suitable work apportioned him in the byre or the dairy, and in fine weather in the garden or the field. Strong lads of fifteen or sixteen can be taught ploughing and harrowing. Hedging and ditching, the management of machinery under supervision, some of the operations of the harvest-field, and many little tasks necessitated by the keeping of stock could be done by boys. In a school with a high tone, the most menial work could be made honourable; and that end could be attained which of all others is at the present time most to be desired for our English youth, the raising of manual labour to its true position as one of the essentially noble forms of human activity.

Hitherto we have dealt with the farmer as a farmer. We must not forget that he is more than a farmer; he is also a man. We cannot but notice, however, that the course of training—that circle of scientific study and practical work, which has appeared to us to be the best preparation for a farm life—would be of general utility also, and would tend to develop those powers of mind and those habits of accurate observation and the adaptation of means to ends, which are of the greatest importance in every career.

There is, however, another side to human character: man stands in various relations to his fellows, and the highest power he possesses is that by which he looks up with reverence and love to the infinite Source of life itself. In these two respects the boy needs careful nurture, and at no time does he need it more than during the latter years of his school life. Literature, the highest thoughts of the wisest men, expressed in the noblest language, and Art, with its refining and elevating influence, are undoubtedly the best means at the teacher's disposal for this higher training, and if these be omitted or relegated to a subordinate place in the scheme of education the result must be disastrous. The danger is that the pressing claims of so many new departments of education should crowd literature and art

but. This danger is a very real one. Circumstances have combined to make it extremely difficult in our scheme of public elementary education and in what we call our modern technical education, to find room for the more humanising elements in education. It must, however, at all hazards, be done. A fair proportion of time must be kept for literature, and no teacher should be satisfied without giving their due place to art and music as well.

Whether the time at our disposal should be partly occupied in acquiring Latin or French or German, in addition to a correct use of our own language and an intelligent study of our native literature, is a question which may be left open. The knowledge of another language is not of such immediate practical utility to a farmer as to a merchant or a professional man. Latin is the most useful instrument a schoolmaster has at hand for drilling the youthful mind into habits of industry, careful thought, and accuracy; and I, myself, do not know what can replace it. If Latin be begun early, Latin literature might be of use as literature, or French or German might be acquired without much trouble, but the chief means of imparting culture to our young farmer should be an introduction on pleasant terms to the great authors who have used our native tongue, and, in translations, to a few classic writers of other lands and ages.

The main branches of a farmer's education, then, should be (1) Natural Science, as bearing upon Agriculture; (2) Mathematics in relation to measurements, valuations, and business methods; (3) Manual Work, such as will enable him to acquire strength and skill in the performance of all the operations required on a farm; and, lastly (4) the elevation of his higher nature, by cultivating in him a taste for what is great and good and beautiful in art, in history, and in literature.

Let us now consider amid what surroundings and by what means a training such as this could be given. Are we not taken back to the School Province of Goethe? The scheme needs space—a large and varied estate at least, uplands for sheep, undulating fields of waving corn, rich lowland pasture for cattle, a secluded dingle, where the water of a strong stream might turn machinery, and where Tubal might teach Jubal the nature of the more useful metals, farm buildings, cool dairies sweet and clean, laboratories, in which the scholar might be brought into direct contact with those secrets of nature which most nearly concern him, gardens and illustrative plots of ground, class-rooms for quiet teaching, collections of stones, plants and animals, models of buildings, tools and machinery, a museum representative of the wide-spreading branches of this ancient handicraft of agriculture in all ages and in all countries. Art would readily grace such a home of industry as this. Ceres and Pomona, though clad in modern garb, would still be as attractive as ever they were in classic times.

How large such a school estate should be would depend upon the probable number of boys who would be likely to take advantage of such a training as I have described. It is evident that,

as the initial expense would be great, it would be far more economical to have one great school than a number of smaller ones. That such a scheme is practicable there is no doubt. There is organising power sufficient in Englishmen to find it practicable, even on the largest scale and with a view to meeting the general wants of many classes of pupils as foreshadowed by Goethe; but, that it is within reach, on a smaller scale, for agricultural pupils, the attempts already made in this direction prove. Once it is seen to be desirable, all else will follow. A large share of the land of the world has been given to the Anglo-Saxon race; and the art of training a sturdy youth, capable of making the most of the land and of themselves, is worthy of the highest efforts of its best and wisest men.

That such a change in the education of a farmer would have a beneficial effect in the future upon British agriculture, even the bucolic mind is beginning to admit.

One cannot, however, leave the consideration of Goethe's scheme of education, without referring to its main feature. The one quality which above all others has to be imparted to the pupil, by manner and gesture and graduated teaching of a high and notable kind is *reverence*. This is not the place to deal with the question in all its aspects; but, if Natural Science is to minister to this central aim, then it seems to me that a radical change will be necessary in its definitions, its methods, and the spirit in which it is generally taught. The laboratory must acquire something of the dignity of a temple. The words 'force,' 'matter,' 'ether,' must disappear or be more accurately defined, and a word, which suggests life instead of death, a word with grand and awe-inspiring associations, if any, must take the place of those, which hide from the minds of teachers and pupils alike the ineffable Power in whom we live and move, and have our being.

If this were done, one can imagine a school, in which Natural Science would be the main study, becoming imbued with a lofty and humane spirit, the effects of which would be to send out into the world a class of men engaged in the most directly useful of human occupations, equipped, not merely to earn their living in a noble way, but to combine with this a love for Nature, a spirit of affectionate inquiry into her secrets, and, more than this, a power of effectually applying her resources, as they have never been applied before, in the great battle of our race against hunger, disease and vice.

For is it not almost self-evident that the cure for the open sore of humanity, the condition of the squalid millions of our great towns, is to bring them back to the country and enlist on their behalf the beneficent influences of soil, and light, and air? What hinders this work? Is it not the lack of men, fitted for leadership, possessed of a practical knowledge of agriculture in its various branches and trained to believe in the exhaustless stores of energy that Nature keeps in reserve, waiting only the magic touch of intelligence, linked with obedience, to allow it to run in life-giving channels?

Might not a great agricultural school, such as I have endeavoured to describe, be a nursery for such men?

II.

As the plan sketched in the foregoing part of this paper may be objected to as altogether too ideal to be of practical use at the present time, I proceed to offer a few suggestions as to the steps that might be taken to form such a school on no very ambitious lines, with an outline of the more distinctive features of the curriculum.

The aim throughout should be to make it a large school. What is wanted above everything is that the boys should get a pride in their profession, an esprit de corps, a feeling that they too are taking part in the work of the world, and that the quality of that work is of more importance than the pay attached to it. We expect a clergyman, a doctor, or a soldier to feel this, and they get the feeling by being thrown together with others of the same calling and being placed under the influence of men eminent in their profession. For this a large school would be required, and every effort should be made to attain it.

If several counties were to unite there ought to be a possibility of getting 200 pupils, but it would be no easy matter. The farmers themselves are, as a rule, unlikely, for some time to come, to see the necessity of such an education for their sons; and they are so conscious of the difficulties of an agricultural life that they do their best to bring their sons up to some other calling. The slightest sign of intellect in a boy is at once taken as a reason why he should be a bank clerk or a draper's or grocer's assistant, rather than a farmer.

To so great an extent is this the case that one is sometimes led to think that the agriculturists of the future must be largely recruited from the sons of our commercial and professional classes. An Agricultural School would make this more practicable than at present; it would be just the place for such boys as have a taste for an out-of-door life, and do not take kindly to the desk or to professional study. But there should be for them, on leaving the Agricultural School, some intermediate training provided, where they might serve a true farm-apprenticeship under real farmers and become completely fitted to manage a bit of land for themselves. One of the great difficulties of farmers is to get young lads to help in the work of the farm. It seems to me that there are many city lads, who, if they had the preliminary training of an agricultural school, would be found extremely useful to such farmers, and would thus obtain for themselves a practical knowledge of farming, and fit themselves inexpensively for an agricultural career either at home or in the Colonies.

One means of obtaining boys from among the sons of farmers might be by scholarships; and it is difficult to see how money set apart for scholarships could be more appropriately applied than by helping struggling farmers to give their sons the best possible training for their own calling. If seven scholarships were given annually for this purpose, two of £25, two of £20, and three of £10 by each of five counties and they were tenable for three years, this would bring into the school the first year 35, the second year 70 and afterwards 105 pupils.

It is not too much to expect that the remaining 95, *i.e.*, 19 from each county would be made up by other farmers' sons and boys from other classes, who wanted to take to an agricultural career.

Let us suppose then that we could get 200 boys. What should we require for them?

(1) *The Governing Body*.—A Board of Governors elected by the Education Committees of four or five County Councils, together with the following, appointed by the Central Education Authority. 1. An eminent agriculturist. 2. An eminent man of science. 3. Some one conversant with the theory and practice of education.

(2) *Capital*.—This would be provided by the combined effort of the various counties for whose joint benefit the school would be founded.

(3) *Fees*.—An inclusive fee of 30 guineas per annum for boarders. Anything higher would probably be felt to be prohibitive by the class of farmers for whom the school is intended.

(4) *School Buildings*, with hall, class rooms, dormitories, playgrounds, &c.

(5) *Chemical and Physical Laboratories*, and a room for microscopic investigation.

(6) *School Museum*, containing minerals, rocks, soils, manures, grasses, seeds, weeds feeding stuffs, farm-products, injurious insects, and natural history specimens and diagrams.

(7) *Library* of standard agricultural, scientific, and literary works.

(8) *Carpenters' Shop*, with benches, lathes, and tools, for a graduated course of instruction in woodwork, combined with drawing to scale.

(9) *Smiths' Shop*, with forge, anvil, vices, drills, lathes, &c., where regular instruction would be given in iron work, especially in the repair of tools and machines.

The instructors in the manual work should be men of thorough practical ability, but possessed of a sound knowledge of the principles underlying their work.

(10) *School Farm*.—Several hundred acres of suitable land, which might be rented, not purchased, but should be stocked and managed solely with a view to impart the greatest amount of instruction to the pupils. This, of course, would not be the most economical management; but yet a considerable return might be looked for from the produce of the farm towards the rent and wear and tear of machinery and the labour required, additional to that of the boys, if not as interest on capital.

The farm would be the finest possible object lesson to the pupils—a complex, organised whole—well repaying careful study in all its details, in its everyday working, as well as in the scope of its yearly routine, and the connection between its various departments.

If the school should be fortunate enough to obtain as its chief instructor in practical agriculture a man who was, on the one hand, a born farmer, an essentially practical and successful worker, but who also had the power of influencing boys and imparting to them instinctively this spirit and genius for practicality, then the chief difficulty would be overcome. There are such men, and to make them the instructors of youth, instead of letting the whole work of education be done by theorists and book-worms, is one great want of our age.

The farm should be large enough to give sufficient illustration of the various kinds of husbandry. It should have an orchard and garden, where fruit and vegetable culture could be practically studied, and a dairy, where many boys could work together in butter and cheese making, as in our Dairy Schools.

Poultry and bee-keeping, on the most improved principles, should receive their proper share of attention, and there should be experimental plots. These would not be intended so much for original research as for demonstrating well established results such as the effects of various manures, singly or in combination, on our leading crops. This would be found more effective for the education of the pupils than mere oral instruction, as to the processes, given in the class room. Smaller plots would show the growth of various grasses, clovers, roots, etc., not much grown in the neighbourhood, actual specimens having a great advantage over drawings, however good. Plants, illustrating the chief natural orders important to farmers, might also be grown.

The farm buildings, machinery, and implements used on the farm should be of the best possible kind, and would themselves form a most interesting subject of study, both as to their original construction and as to the means best adapted for their careful preservation and judicious repair.

(11) *Curriculum*.—A detailed syllabus of the course of instruction, bringing out the connection between the principles of the various sciences and agricultural practice, would require the joint intellectual effort of many scientific experts united with the practical experience of our most successful farmers. Upon the gradual development after many trials of such a curriculum, and the bringing into it in due proportion the other

elements of a liberal education, the final success of the scheme I have been advocating will largely depend. It would be most unwise to expect the lines of a new method of education to be laid down without long and serious thought and patient trial.

I may, however, add a rough division of the time and a summary or inventory, necessarily imperfect, of the various subjects of study with which a farmer ought to be acquainted. These may form the material out of which a proper course of instruction might possibly be evolved. In its present shape, I fear, it is likely to destroy the effect of much that I have said, and, to deepen in the mind of the reader the mistaken impression that it is impossible to acquire such multifarious information and skill in so many heterogeneous directions and at the same time receive a truly noble and healthy culture. I am myself fully persuaded that it is possible, but the list will emphasize the fact, of which I am fully aware, that it is a task of the greatest difficulty and one demanding the highest powers of head and heart. The list may also be of use in making quite clear to the least observant, that a farmer requires a technical education of the most thorough and far-reaching kind.

If work began at 7 a.m. there would be, including time for preparation, 43 hours per week. These might be apportioned as follows:—

Agriculture and the Sciences bearing upon it	-	9 hours.
Mathematics and Agricultural Engineering, including Drawing, Mensuration, Book-keeping, Mechanics, etc.	- - - - -	12 hours.
Literary subjects, etc.	- - - - -	10 hours.
Manual work, including Farm work, Dairy work, Land Surveying, Smith's work, Carpenter's work	- - - - -	12 hours.
Total	- -	43 hours.

AGRICULTURAL SYLLABUS.

GEOLOGICAL AND CHEMICAL SECTION.

Soils.—Their origin, formation, and varieties. Peat, Alluvia., and Drift soils. The bearing of Geology on Agriculture. The influence of animal and plant life on the amelioration of soils. Classification and distribution of soils. The constitution of soils. The absorptive power of soils; how increased. The soil viewed as a laboratory, a warehouse, and a machine. Organic and Inorganic matters. The effect of subsoil, texture, colour, situation, slope, proximity to the sea, forests, &c., on the fertility of soils. Causes and indications of fertility and infertility. Improvement of soil by (a) *cultivation*—tillage, drainage, irrigation, clay-burning, paring and burning, warping, mixing soils, &c., &c.; (b) *manures*.

Manures.—Their physical and chemical action. General manures exemplified by Farm-yard Manure. Its management. The various circumstances which influence its value. Its application. Value of manure produced by feeding animals on various foods. Compost heaps. Green manuring. Guanos; their economical use, &c. Artificial manures; their uses, composition, adulterations and means of detection. Lime. Conditions regulating the form in which it should be applied. Its physical and chemical action on the soil. Quantity applied, and method of application. The suitability of the various manures for certain crops under varying circumstances, as determined by the Rothamsted and other Agricultural Experiments. Valuation of Unexhausted Manures.

BOTANICAL SECTION.

Plants.—General structure of a Green Plant; functions of the root, stem, leaf, flower, and fruit. The food of plants. Formation of seed. Germination. Changes, chemical and otherwise, of a plant from seed to maturity. Moulds, fungi, and "micro-organisms," useful and harmful to the farmer. Special vegetable parasites such as rust, bunt, smut, potato disease, &c. Identification of good and bad grasses, also of farm weeds.

ENTOMOLOGICAL SECTION.

Insects, &c.—Life history of insects. The chief animal parasites of farm animals and crops, their identification and means of prevention, *e.g.*, wire worm, warble fly, leather jacket, &c.

PHYSIOLOGICAL SECTION.

Animals.—General structure of the animal body. Functions of the various organs. Digestion in detail. Composition of the chief foods. Adulteration of feeding stuffs. Economical feeding. Health rules:—ventilation, exercise, warmth. Rules to be observed in the breeding, rearing, and management of animals. Detection and prevention of the commoner diseases.

THE PRACTICE OF AGRICULTURE.

Cultivation of Crops.—Ploughing, harrowing, rolling, drilling, hoeing; number of horses and men required; quantity of work done per day and cost. Differences for various classes of land.

Application of manures to various crops; quantities and kinds used; cost per ton and per acre.

Sowing seeds by various means; quantities of the various seeds sown per acre; detailed account of the cost of raising various farm crops, showing profit or loss.

Harvesting crops; number of men required and how arranged in the field; quantities harvested per day; detailed cost per acre.

Stock-keeping.—Breeds of horses, cattle, sheep, pigs, and poultry. Feeding, rearing, and general management. Artificial foods. Rations for animals when growing, fattening, or in milk. Estimation of live and dead weight.

Dairying.—Composition and analysis of milk. Treatment of milk. Butter and cheese-making. Utilisation of waste products.

Miscellaneous.—Orchards and their management; fruit culture.

Preparing produce for the market.

Farm buildings; their aspect, size, ventilation, and drainage. Hedging and ditching.

Bee-keeping.

Cost of Implements, their construction and working.

Stocking of Farms.

Calendar of farm operations.

FARM WORK.

The above subjects should be discussed, as far as possible, when the operations are actually taking place on the farm, so that the boys can verify the class-room teaching by seeing and taking part in the same operations on the farm in the same week, as far as age and strength permit.

AGRICULTURAL ENGINEERING.

Drawing.—Geometrical, Freehand, and Model. Machine and Building Construction, use of drawing instruments, drawing to scale, drawing different parts of engines and machines, arrangements of different bonds in brickwork, different kinds of stone used in building, cement, mortar, &c., strength of beams, &c., estimates of quantities and price of materials.

Land Surveying and Mensuration.—Use of surveying instruments, chain and theodolite surveying, levelling, plotting and determination of areas, measurement of stacks, timber, &c.; calculation of weights from measurements and specific gravity.

Mechanics, &c.—Mechanics and Hydrostatics, and the study of farm machinery, pumps, turbines, &c. Physics, especially Heat in relation to steam and gas-engines.

Manual Work in Carpenters' and Smiths' Shops.—Use of tools, making various kinds of joints, dovetailing, &c.; grinding and sharpening tools, use of the lathe for wood turning, use of smiths' fire, working hot iron, welding, &c.; working cold iron, turning, chipping, and filing. Forging and tempering tools. Lessons in horseshoeing. Soldering and brazing.

There is one thing upon which I would in conclusion lay great stress. It is that there should be no attempt to combine a school of this type with others, and that there should be no yielding to the wishes of individual parents in allowing particular boys to be made exceptions of, with regard to some portions of the course. The needs of the individual boy should be studied and his bent encouraged, as far as the main features of the course allow; but those main features should be most rigidly adhered to, for it is only by being true to its type that any school can be really effective.

Anyone who will attempt to realise in any measure the foregoing scheme, will find his greatest difficulty lie in the apathy of the ordinary farmer, but instead of allowing this to discourage him, he assuredly ought to find in it the strongest proof of the necessity for such an attempt, and I can promise him that his greatest source of encouragement will be the hearty approval and co-operation of the best and most successful farmers in England.

JAMES MORTIMER.



THE EDUCATION, EARNINGS, AND SOCIAL CONDITION OF BOYS ENGAGED IN STREET-TRADING IN MANCHESTER.

In the following pages a short account is given of the chief street-trades carried on in Manchester by boys* under the age of 20 or 21 years. Incidentally reference has been made to other persons engaged in some of these trades, but with them we have not been directly concerned. Our interest has been in the inquiry, how street-boys live; and in pursuing this question we have been led to ask what is the nature of the trades by which they earn their living; how much they are able to earn in the several trades which we have considered; what various standards of education are represented by the different trades; how the boys spend their money, and what are their amusements.

The
questions
proposed.

The classes of street-boys which are treated are the following:—

- I. Newspaper sellers.
- II. Organ grinders.
- III. Ice cream sellers.
- IV. Railway touts.
- V. Flower sellers.
- VI. Match sellers.

Six chief
classes of
street-sellers.

It should be said at the outset that the results which we have obtained have not been based on any formal census, for in the first place it would be almost impossible in dealing with people many of whom have no fixed place of abode, but are constantly in migration, moving from one part of the town to another, and often from Manchester to Liverpool and Chester, and other towns, to make a complete enumeration; and in the second place, because even if it were possible to arrest for a time the unceasing fluctuations of this part of the population, nothing could be gained—no trustworthy information could be elicited from the boys whom we propose to describe—by any ordinary method of examination. Street-boys at once distrust and wish to please all men; and the answers which they give to any question proposed to them by strangers are dictated partly by the determination to disclose nothing which it may be prudent to conceal, and partly by the desire to gratify the curiosity of the inquirer by giving him the answer which he appears to expect to get. On the other hand, they will reveal anything, however intimate, to those whom they regard as their friends; and if there is any value in the pages which are to follow it is due to the fact that we are able to

Method
pursued.
A formal
census
impossible.

Difficulty of
collecting
information

* Girl street-sellers are very rare indeed in Manchester; in Liverpool they are numerous.

reckon a large number of the boys belonging to the various classes named among our friends. We have had the opportunity of observing these boys closely, not only in the streets, but in many of the lodging-houses in which they live. There we have been admitted, at first with curiosity and suspicion, but afterwards with frank goodwill, by the inmates, and during the last four years some typical lodging-houses have been visited on alternate nights every week, as well as on Sunday afternoons. It has been in conversations carried on during these visits, when much could be learnt by the eye as well as the ear, that most of the information we have collected has been gained; and it has been gained, for the most part, not by direct questioning—a method which can rarely be practised without effrontery, though it is often attempted upon the poor—but by observation. And we believe that we have not been deceived. When a youth who has been trading upon the pity of the sentimentalists in the streets, by calling their notice to the deformity of his back and the loss of his legs, has in the seclusion of the lodging-house released his legs from their daily confinement, and stood straight-backed, those who have witnessed the restoration are unwilling to believe that they have not been taken into the confidence of the performer.

We shall now speak of the chief kinds of street-traders in order, dealing with the peculiar characteristics of each. And afterwards we shall add an account of the general methods of life which are common to the several classes.

I.—NEWS BOYS.

Of the street-trades carried on by boys, newspaper selling is by far the most popular, and very large numbers are employed in it daily. They may be divided into two classes:—

1. Boys over 14 years of age, who frequent the busiest parts of the city, and sell not only the later evening papers, but also the mid-day and early afternoon editions.

2. Boys under 14 years of age (*a*) who go out upon the streets in the late afternoons and evenings of their own accord and with the consent of their parents; (*b*) who are sent, without consideration of their own wish, by their parents, to sell papers, chiefly in the artizan districts and the nearer suburbs, both in and after school-hours.

(i.) Boys of the first class are generally found to have left their homes for various reasons. The unkindness of parents or of step parents, the discomfort of the cottages in which their parents live, want of employment, impatience of restraint and control, and love of independence are the main causes which urge them to set out in life on their own account. The trade of newspaper selling offers them great attractions. In the first place, they are their own masters, and can do as they please; then there is the unfailing interest of the streets; their appetite for adventure is largely gratified; and last, for we believe this is of the least weight with them, there is the prospect of a very

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newsboys.

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fair income. The work never begins before 11 a.m. (and this is itself a matter of some moment, since early rising is greatly disliked by the members of the class which we are describing), and it is rarely continued after 7 or 8 o'clock in the evening.

In the course of this short working day, there are several intervals varying in length from 30 to 50 minutes, which are beguiled with the amusement of gambling.

Working under these easy conditions, newsboys can make from 10s. to 14s. a week if they have an ordinary share of alertness. A smart lad of 16 years or more is not seldom able to rise above the higher limit, and to get even as much as 17s. or 18s. a week. In a factory or foundry, working from 6 a.m. to 6 p.m., a boy earns about 13s. a week. The comparison needs no comment.

Some news-boys buy their stock at the general offices, or from the news-carts at distributing stations; a far larger number buy through intermediaries.

It is the custom of the leading papers to deal with local agents, who buy large numbers of every issue at a low rate. Each of these local agents in his turn hands, let us say, 150 dozen papers to a trustworthy youth, who is a little older than the ordinary news-sellers, and, having sprung from their ranks, knows nearly all of them who belong to his quarter of the town.

This youth, who acts as a middleman between the local agent and the street newsboys, earns from 18s. to £1 a week, a sum made up partly of the commission allowed him on the papers he sells by the local agent, and partly of a small fixed wage paid by the same person; he makes no direct profit at the expense of the boys with whom he deals. The newsboys can, if they will, buy their papers from the local agent, but there is no advantage to be gained by this method, and they rarely adopt it. They prefer to buy from the middleman, from whom, if he knows them and is satisfied with their character, they can get credit,* otherwise they must pay cash. It is remarkable that the middleman very rarely makes a mistake in judging whether he can safely let boys have papers on credit or not; when he is deceived, he can inflict a severe punishment on the defaulters, by refusing to deal with them again, and by damaging their character in the eyes of other middlemen, and so shutting these boys out of the trade, or at least preventing them from ever getting credit again. The boys appreciate this risk, and accordingly, when they have been trusted, they pay the price of the papers regularly in the evening to the middleman, who remains at his stand or in his little shop, to receive their moneys. The price at which the boys buy is 4½d. for a dozen of 13 half-penny papers, and the charge is the same for all the evening papers, and the half-penny†

* The local agent sometimes, but not often, gives credit to a boy who is known to be at once energetic and quite trustworthy. And the local agent and the middleman alike are willing to buy back at the original price, from a boy who drives a particularly good trade and takes up a large stock of papers, the copies which he fails to sell.

† Penny morning papers are not sold by street-boys.

morning papers. The newsboys thus make a profit of almost 3½d. in the shilling, and, if they have a good character, they can do without capital.

Intelligence.	These boys are not unintelligent. On the contrary, many of them are quick and bright. They know how to amuse themselves, and they have humour. We have usually found that they have passed the fifth standard in the elementary schools.
Education.	This is the level to which almost all of them belong. There are, of course, those who have not gone so high. We do not know any who have gone higher. Street life encourages the art of conversation. These boys can talk, and they are sociable. It is an interesting study to compare them with pupil teachers.
Social qualities.	Pupil teachers, of course, know many things, and are familiar with the names of many subjects of which the newsboys are ignorant. But the <i>ennui</i> , the speechlessness, and the heaviness of pupil teachers are not known in the newsboys, whose wit is ready, and whose life, though attended with great dangers, is yet more interesting and physically more healthy than that of the more highly educated class.
Newsboys and pupil teachers.	
Danger of their vocation.	The dangers, however, of the newsboys' life are really serious. The excitement of their career tends to make them more and more reluctant to work steadily, even during the few hours when they are plying their trade, and more and more unfit to enter upon more regular but more monotonous work. They quickly become careless of their appearance, except when they are studiously untidy, for a picturesque raggedness is sometimes of service to them. They rarely possess any clothes, except those which they are at the moment wearing; and, with very few exceptions, they do not save any money. The exceptions to this rule are provided by boys who, through some special misfortunes, are driven upon the streets, and, disliking street life, save the surplus of their earnings or gradually force their way back into the more regular conditions of life and become good citizens.
Exceptional cases.	
Deterioration of character, and decline in society.	The great majority are unwilling to forsake their calling until they become men (a man earns less in news selling than a boy), by which time they are ready to fall into a lower rank of society. Many news boys protest that they want more permanent work, but they rarely keep it when it is found for them. They cannot submit to ordinary civil discipline, though, strangely enough, they profess to like the discipline of the Militia, into which force many of them enter. It seems clear that education by means of books as it is now given fails to touch boys of this mettle. We have said that they are not stupid, or even markedly backward judged by school standards. But the training of the schoolroom does not afford them a discipline of the character. And it is important to remember that qualities which prompt them to revolt against school teaching and school law, and after school days are over, against civil ordinances, are not entirely bad qualities. They find school life and civil life dull, and though this may argue a lack of patience and sobriety, it may also indicate a valuable quickness and elasticity of spirit, for which
The discipline of the Militia is attractive to these boys.	
Good and bad qualities.	
Ordinary school education unsuitable for them.	

there is not enough room in the institutions against which they kick.

As they grow older they sink to a lower level, both morally and economically. They become racecourse frequenters, or they take to flower-selling—an uncertain trade; or they hawk “novelties;” or, more commonly, they become market porters—in fact, little better than loafers, without aspiration, and content with the squalor of the common lodging-houses in which they live, if only they have enough money for their drink and their gambling.

(ii.) The second of the two classes of newspaper sellers is far larger than the first. It is composed of boys under the age of 14. A curious misapprehension, the product of a short-sighted philanthropic sentiment, is common with regard to them. They are frequently described as the victims of cruel or callous parents, indifferent to the hardships which the children are alleged to undergo, and often violently punishing them for any failure to sell the papers committed to them. There are, no doubt, instances in which these young news sellers suffer under the malice or the neglect of their parents, but so far as our observation goes, they are, happily, very rare.

Boys under 14.
The second class of news sellers.
Misapprehensions with regard to them.

It will be convenient to make two subdivisions of this second class of news sellers. In the first of the subdivisions (a) we place the children of respectable, though often very poor, parents—children who go into the streets, almost always after school hours, and sell the evening editions, either to increase their own pocket-money, or to augment the family income. These earnings are often a welcome addition to the money which the father, and perhaps the elder children of the household, earn as wages; but they are very far from constituting the family income, so that the parents cannot be said to live upon the children's work, nor do they cover the living expenses of the children themselves who engage in this occupation. It is a *πάριπρον*, and mainly an amusement. These children come from the homes of the lower working classes, and are quite as well cared for as most children of the same rank.

1st sub-division.
(a.)
Children of respectable parents.

It is worth notice that among all classes of the “poor” there are social prejudices as strong and definite as any which obtain among the well-to-do and the rich. Now, the respectable working man looks down upon the ordinary street seller, but he does not feel that he is bringing any disgrace upon himself or his family by allowing his children, while still of school age, to sell newspapers on the streets in this way. And the children themselves enjoy the work, and in after years they do not suffer any social disadvantage, or fall to a lower level of society on account of this amateur news selling. We have ourselves known a large number of such children, who, when they became old enough to leave school, have found stable employment, and succeeded in making a good position for themselves, notwithstanding their early experience as street sellers. And it is further to be remarked that the ranks of the older street newspaper sellers (whom we have already considered) are not recruited from the class which we are now describing.

A social convention.

Ranks of the older street sellers not recruited from these.

Evils of street-trading apt to be exaggerated. It is not the trade which takes them out of doors.

It is often urged that these children must necessarily suffer by being engaged in a street-trade. And it cannot be denied that they do suffer by being so much upon the streets. But it is not the trade which brings them out of doors. Children of this class live in the streets; they are always out of doors, except at mealtimes and when they are in bed. And it is not easy to see how the mere selling of papers can hurt them. The municipal bye-laws which forbid street trading by children after the hours of seven in winter and nine in summer, and which are pretty strictly enforced, do not touch the root of the matter. It may even be regarded as an open question whether children are not better employed when selling papers in the streets than when they are engaged in many of the games which are played in the courts and side streets in which their homes lie, or when they are merely idling and watching the gambling which is the universal accompaniment of what appear to be innocent enough amusements.

And it is not a question, it is notorious that the homes to which such children might, if they would, return are often so small and ill-ventilated, that the whole family cannot comfortably stay in them, especially during the long evenings of winter.

The 2nd sub-division

(b). The children of very poor, and often worthless parents.

Irregular attendance at school.

Standard generally reached by the age of 14.

(b.) There remains to be considered the second sub-division of the second class of news-sellers. These are children under 14 years of age, but differing from those whom we have just described in that they come of parents who are in all cases in extreme poverty and often dissolute and worthless. The parents lead a kind of nomadic life, moving very rapidly from quarter to quarter, and even from town to town. By these frequent and sudden migrations they are able to elude the vigilance both of the police and of the School Board officers. The children, though still of school age, are often upon the streets selling their papers during school hours, and in spite of the prosecutions which are made against their parents, their attendance at the schools is so irregular that they make very little progress. It is seldom that one finds a boy of this class who has passed or even reached the fourth standard when he comes to be 14 years old.

These boys take to the streets permanently for their livelihood: a few of them continue, after the age of 14, to earn their living by selling newspapers, but most of them sink into less satisfactory kinds of occupation. Even among these children, we may remark finally, it is very unusual to find any who seem to be habitually ill-treated, or even subjected to occasional violence.

II.—ORGAN GRINDERS.

Two classes of organ grinders—those under 20, English—those over 20, Italians.

Organ grinders in Manchester form a class which presents some points of interest. Though their business is not one of buying and selling, they may suitably be considered among other classes of street-traders.

It may be taken as a rule with very few exceptions that organ grinders under 20 years of age are English, and those above this age Italians.

Young and old, English and Italians alike, rent their organs from men who keep them on hire. These men are invariably Italians. The rate of hire varies according to the value of the organ, and the pressure of the demand. At the present time (February, 1900) the charges range from 1s. 6d. and 1s. 8d. to 2s. a day.

How they work.

The hiring money is generally paid in advance, though credit is sometimes given to grinders who have been known for six months or more to the owner. The demand for organs is always, even in the slackest season—the mid-winter months—considerably in excess of the supply.

Hire of organs.

Demand for organs in excess of the supply.

The profits of organ grinders vary very much in different districts; at best they are not very great, and always, of course, uncertain. The suburban districts pay better than the central parts of the city. Very little comes from hotels, to which novices in the trade are apt to resort.

Profits—varying in different parts of the city.

The quickest-paying districts, and those from which the most stable incomes can be derived, are the poorest quarters of the town, where the grinders play to people who come out into the street to hear the music and to dance to it.

The best paying districts.

We find that the takings of an organ appear to vary from 4s. 6d. to 10s. a day, so that when the cost of hire is subtracted (we will reckon this at 2s. a day) the profits will be something between 2s. 6d. and 8s. a day. It is, of course, to be remembered that, in the case of the English grinders, these profits have to be divided between two persons, for the barrel organ is always attended by two partners. In the case of the Italians, though only one person may appear on the streets with the organ, the profits have frequently to be divided among a large number, for the grinders are generally men who have wives and children to maintain. This consideration in part accounts for the fact that whereas the English organ grinders (that is to say, the younger division of the grinders) ply their business irregularly, the Italians are much more constant in their rounds.

Earnings of grinders.

English grinders partners.

English grinders work irregularly.

Indeed, the English grinders commonly play their organ only 'or an afternoon or an evening, and sometimes they are able to hire an organ for half-a-day only, though they are generally obliged to take it out in the morning and keep it idle till they are ready to go upon their beat. If they wait till the afternoon to hire, they run the risk of finding that all the organs are already engaged.

Organ grinders exercise their vocation upon regularly defined districts or beats, to which a goodwill is attached, as it is, for example, to a tradesman's business or a doctor's practice. New comers or beginners must either strike out a fresh district for themselves, or else buy* the goodwill of that into which they come from their rivals who are already in possession. An infringement of this unwritten law is punished either by a boycott or by personal attack.

Organ grinders' districts. Goodwill.

* The rule is far more rigorously and systematically enforced by the Italian than by the English grinders. The latter are more careless, and being less regularly on their beats, are not so well able to guard against "poachers."

It is always to be borne in mind that the social convention and the etiquette of the poor (even when they greatly differ from those observed by the well-to-do—in this instance, the two codes are sufficiently alike) are very strictly guarded, and the censure which is passed upon defaulters is expressed with a clearness which cannot be misinterpreted, and with an emphasis which only persons of great physical courage can affect to ignore.

The values of various districts assessed.

The values of districts are carefully and shrewdly estimated particularly by the Italian grinders; the individual houses in suburban parts being rated as "two-penny" or "threepenny" houses, according to the amount likely to be given or usually given by the several tenants to the grinders.

Organ grinders and the Police.

It might be expected a priori that organ grinders would prove to be particularly liable to charges of obstruction. The facts confirm such an expectation. Grinders dread the police, who sometimes seize the organ and take it to a neighbouring police station, and sometimes apprehend the Italian, or one of the two English partners, who are playing. Such a disaster brings a twofold trouble on the grinders, for they not only have to encounter the magistrates and receive judicial punishment, but they also lose favour with the owner of the organ, who is less willing afterwards to let out his instrument to the offenders.

Younger grinders generally live in common lodging-houses.

The older grinders not uncommonly have cottages of their own, or else they lodge with the owner of the organ they use, or sometimes with English lodging-house keepers. Of the younger grinders, the great majority are occupants of common lodging-houses; a few of them are known to be lodgers in the cottages of Italians engaged in organ grinding, though none live with the owner of the organs.

They never live with their relatives.

In one place these youths are certain not to be found. They do not live at home with their parents or other relatives, even if these should be resident in Manchester or in the same quarter of the town. Generally they have no dealings of any sort with their kin, and know little or nothing about them.

It is, we think, important to note that the English organ grinders are amongst the worst educated, and certainly the best physically developed of street-traders. Ice cream sellers closely resemble them—they form, as will be shown later, a small division of the same group—and some of the railway touts may vie with them.

Standard of education. Organ grinding hard work—the beneficial effects of this.

It would be a difficult task to find many youths engaged in organ grinding who have passed a higher standard than the third.

There is one redeeming quality in the occupation which we have tried to describe. Although the work is irregular, particularly in the case of the English grinders, with whom we are chiefly concerned, it is yet hard. An organ is very heavy, and a considerable amount of physical exertion is undertaken by those who wheel and play it. The result is that they are not ignorant of the meaning of labour; they have the advantage of getting tired in making their living, and they do not resent or decline the effort which is demanded of them. Consequently—for there is a causal connexion here—it is not altogether unusual for organ

grinders to find their way into some sort of regular and permanent employment. They are capable of toil, and not unwilling to submit to it. For skilled labour they are, of course, unfit, but they are well prepared for unskilled work. It is a rule that the less effort any street-trade imposes upon those who engage in it, the less likelihood there is of their entering upon fixed and regularly paid work, whereas those street-traders who are forced, even occasionally, to work hard, are those from whose ranks the largest number rise to a better way of life.

III.—ICE CREAM SELLERS.

A considerable number of youths are employed in Manchester as ice cream sellers. The great majority of these are Italians. English youths are not apt to follow this trade, and the few who are engaged in it are found to have drifted into it by a previous connexion with an ice cream dealer who is also an owner of barrel organs. Little therefore need be said about them, for they belong to the class which we have already treated, under the head of organ grinders. The English ice cream sellers are usually engaged to drive or push a small cart, and sell their goods in the poorer suburbs, but they very rarely remain in the trade for more than a few months.

Belong to the same class as the organ grinders.

There is a social, indeed a national, prejudice against both of these occupations. The work is despised in itself, and an additional stigma is fixed upon it inasmuch as the employers are not English, but Italians. Working for an Italian is held to be a kind of disgrace. An ice cream seller getting a commission of 3d. in the shilling, is often able to make as much as 15s. a week, but this high remuneration does not suffice to reconcile English youths, except during short periods of difficulty and want, to conditions against which they instinctively revolt.

This work is despised by English youths.

IV.—RAILWAY TOUTS.

Railway tous are a large class, composed of persons of all ages, little children and old men. Most of them, however, are boys between the ages of 15 and 19. They are dwellers in common lodging-houses, to which they have escaped from the same sort of homes (and for the same reasons), as those from which the older newspaper sellers come. Their ranks are continually being recruited by lads who have no money, and are unable to get any credit. They are generally lazy and shiftless, though occasionally there may be found among their number very honourable boys who through sheer misfortune have come upon the streets, and who eagerly seek, what they are nearly always able to find, some better and more permanent work. A steady boy need not go long in Manchester without decent and regular employment.

Class from which they come. Their character.

Touts are of two kinds. There are, first, the youths who hang about the platforms and approaches of the railway stations, seeking, often in a listless way, for a job, and offering to carry bags and parcels at a small remuneration. They rarely begin

Exceptional cases.

Two kinds of railway tous. The first kind.

this watch before 11 o'clock in the morning, and when they have earned enough to provide a cheap breakfast, they will lounge about for several hours, gambling with any money which may be left in their hands, and making very little effort to earn anything further until the end of the day, when they strive to make enough for their night's lodging and for supper.

If they do well one day they will not usually come out on the next.

Prison life. The boys who live by touting are generally familiar with prison life: most of them have been imprisoned at one time or another for "obstruction" and many of them have been imprisoned frequently.* They are indeed quite callous, and indifferent to the sentences of seven days, or fourteen days, or a month's imprisonment, which are passed upon them. This kind of punishment has, indeed, the effect of degrading the boys who are subjected to it, and of making it exceedingly hard for them to take up a more settled way of life; but as a deterrent from offence we have yet to learn that it has any effect at all.

The second kind of tout. Touts, of the other kind, are those who wait upon commercial travellers and others, and wheel a handcart laden with samples from one house of business to another. These form a higher branch of the profession and make a much more satisfactory living. They commonly earn 2s. 6d. a day, and though they may not have more than two or three days' work in a week, they are generally unwilling to leave their method of life in favour of more fixed employment. In the free days they can make a little money by carrying luggage for passengers at the railway stations, but as a rule they prefer complete idleness, or the occupation of gambling in the streets or attending race-meetings. Thrift is unknown to them.

A tout is usually in partnership with another youth, with whom he divides his earnings. The partners (who are called "Whackers") generally show a considerable fidelity to each other so long as the union lasts, but this is very rarely a long time. One of the partners is literally a sleeping partner; but the agreement is based on the understanding that each partner shall have a period of repose alternating with the period of work. The dissolution of the partnership is almost always due to the refusal of one of the "whackers" to wake and do his share of work.

Physique and education. Touts of both kinds are found to be strong and well developed lads, though they yield, in this respect, to the organ grinders, with whom they are on the same level as regards education.

We have noticed with no less pleasure than interest that boys who have spent any time in the Manchester Certified Industrial Schools are hardly ever to be numbered among this class. The admirable discipline and training given in these schools, and the equally important and careful watch which is kept by the school authorities over their pupils when they have left the schools, have had a remarkable success in making them fit to enter and able to maintain themselves in good and permanent employment. It has fallen to us to see not a little of the class of boys who are taken into these schools, and of the boys while they are still in the schools and after their time of training has expired, and we have been constantly forced to admire the value of the work done by these institutions.

V.—FLOWER SELLERS.

Flower sellers are usually adults. Some of them, a very small minority, are men who live in cottage-homes of their own, and attain a fairly high standard of respectability, equal to that of the ordinary costermonger. Their trade is good, and sufficiently stable. They have stands, for which they pay rent, in some of the best squares and streets.

Usually adults.
Some of them very respectable and prosperous.

But most of the men engaged in this trade are frequenters of race-meetings, who take up flower selling in the intervals between more exciting engagements, and chiefly in the winter months. They are the most shiftless and the laziest of street-traffickers. The risk which they run of having their goods damaged or destroyed by rain and wind seems to foster their carelessness. They are the slaves of chance. Sometimes they employ boys to sell their flowers for them, and themselves remain entirely idle, spending such profits as the boys earn for them in drinking and gambling. They are often unable to write, and only read with the greatest difficulty. They live in common lodging-houses.

Most of them good-for-nothing.

Risks of the trade.

The men employ boys to work for them.

In the spring and summer months a considerable number of young lads take up this business on their own account, in addition to those who work as the servants of adult flower sellers. For this many of them resign for the time what is their usual employment, viz., newspaper selling. Besides these there are casuals, who come upon the streets for a short time, during a period of slack work or unemployment. And there are, lastly, a number of boys whose main occupation is that of flower selling. The boy flower sellers, like the less respectable men in the same trade, are almost always inhabitants of common lodging-houses. The associations formed in these houses are very dangerous, and generally positively harmful to the boys, for they are thrown into the company of men who at the best have failed in life, and whose failure is in most instances due, in part at least, to their own idleness, their thriftlessness, or vice.

Boys engaged in flower selling.

They live in common lodging-houses.

Associations made in these houses harmful to the boys.

Earnings.

In a good season, and for the length of six or eight weeks in the late spring and the early summer, such boys making a profit of 3d. in the shilling are able to earn as much as 15s. a week. But this high rate cannot be evenly maintained all the year round. A small capital is needed by those who take up this employment; a few pence are enough to buy a little stock-in-trade at the chief market.

Our enquiries show that most of the boys who are pretty regularly engaged in flower selling have reached the fifth standard in the schools—a high level for street-sellers. They are, however, weakly lads, unequal to the strain of regular work, many of them deformed in one way or another; and they choose this occupation as the lightest work to which they can turn.

Education.

Physique.

VI.—MATCH SELLERS.

(1.) Adults.	Match sellers may be divided into two classes (1) adults; (2) boys.
Idlers and vagrants, or else	The adult match sellers are frequently tramps, who make this trade a pretext for begging. They are unwilling to work, and form part of that moving population which belongs to no one quarter of the town, and not even to any one town. They are vagrants.
The aged and infirm.	There are, however, other adult match sellers. These are very old people, men and women, the infirm and crippled or the blind.
Rate of profit.	The trade can be started with next to no capital. Many of the large tobacconists sell matches to these street sellers at the rate of four boxes for 3d., and the sellers can make a profit of 3d. in the shilling. It is, nevertheless, a very poor trade, seldom yielding more and generally considerably less than 10s. a week.
Average earnings.	Many boys whose main trade is done with newspapers also sell matches. But there is a small class, chiefly composed of young boys, who sell matches only. They are, as a rule, the children of dissolute and worthless parents; and correspond very nearly to the lowest class of newspaper sellers, not only in regard to their mode of life and their parentage, but also in regard to the standard of education which they have reached. A boy who has reached the fourth standard is not often to be found in this class.
(2.) Boys.	
Matches and newspapers.	
Those who sell matches only.	
Education.	
A comparison.	There is, however, this difference between newspaper selling and match selling; that whereas the selling of newspapers is, under certain conditions, considered by the self-respecting poor to be an employment of which no one need be ashamed—a point which we have already noticed—the match seller bears a social stigma. It is to be added that he makes a very meagre living.
Reflections on the foregoing accounts.	It will have been noticed that, if we exclude match selling, the least satisfactory of the street-trades already discussed are those which yet yield the highest rate of profit during the periods in which they are most vigorously plied. Thus the average earnings of the flower seller in the best season are higher than those of the newspaper seller, whose trade is much more constant. We have pointed out the fact that a certain number of boys, usually engaged in newspaper selling, abandon the steadier trade during the best flower selling season. They are attracted by the higher rate of profit, and very little deterred by the increased risks which they thus run. The instinct of gambling prompts them to this course. The practice of gambling is so universal among the boys who belong to these classes that it must be included in a general consideration which we now wish very briefly to make of their habits of life.
The instinct and the practice of gambling.	
The mode of life general among street boys.	Most of the boys who are engaged in street-trading live in common lodging-houses, and it is interesting to remember that however greatly their profits vary from week to week, and however wide the differences between the takings of one class of

street-sellers and another, what we may call domestic expenses are practically the same for all. These boys make two meals in the day—a late breakfast and a supper. About 4d. is spent on each of these meals. Domestic expenses.
Food.

New clothes are, of course, very rarely bought, and the payment for them is made by instalments.* More often clothes are acquired by exchange, or in return for occasional jobbing. It is not necessary, therefore, in making an account of the ordinary expenditure, to include the item of clothing. There remains, then, besides food, the expense of lodging.

There are some lodging-houses in which a bed can be got for 3d. a night; but most of the street-traders lodge in fourpenny houses, when they are able to afford lodging at all. Sometimes, of course, they are forced to go without lodging, or spend the night as best they may under arches, or in railway sheds and wagons. The landlord of a fourpenny house allows a reduction to those who pay for a week's lodging in advance, charging 2s. a week instead of 2s. 4d. Lodging

The lodging always includes, besides the bed, the use of the kitchen fire for cooking (these boys are often skilful cooks), and the use of a scullery or back kitchen for washing clothes. Adding these two sums together—

		s.	d.	
Food, 8d. a day,	-	-	-	4 8 a week
Lodging, 4d. a night or	-	-	-	2 0 „
				6 8
Total	-	-	-	6 8 a week,

Total of domestic expenses

we get a total of 6s. 8d. or 7s. a week. In other words about half of the earnings of the ordinary street-seller, less than half the profits of the more prosperous, is spent in the necessities of life. The question arises, what is done with the remainder? The remainder is spent in amusements and in gambling. The theatre or the music hall is very regularly attended, and perhaps 1s. a week may be spent on these entertainments. Boys will often go night after night to see the same piece, or the same "variety" programme. At least 50 per cent. of total income used for amusements and

But if we allow 1s. (a large estimate, for admission to the pit of the music hall,† most generally frequented, is had for 3d.) as the weekly expenditure on amusements, there is still left a sum of, let us say, 6s. or 7s., in the case of the poorer, and 9s. or 10s. in the case of the richer street-seller, yet to be accounted for. gambling.
Theatre and music hall.

This sum, half or more than half the total income, is spent regularly, unhesitatingly, and cheerfully upon gambling. The money is almost invariably lost, and does not circulate among the boys themselves, for though they bet upon games of their own, they are in the hands of sharpers, bookmakers, and others Gambling.

* The clothes are not received till all the instalments have been paid; they are reserved for the applicant. The process is called "laying up."

† On Mondays and Saturdays these boys attend their favourite place of amusement with great regularity. If the performance specially pleases them, they will go again, and perhaps twice, to the same place in the same week; if not they frequently go to some theatre to see a melodrama.

Why boys
amble.

who live upon them. The boys do not expect to win, though sometimes they are allowed to get the advantage. But they pay for the pleasurable excitement which they get, and even when they go beyond their surplus, and trench upon the living expenses, and have to go short of food, they feel content. They think that they have had their money's worth.

The gambling is done upon "nap," "pitch and toss," "banker," upon card games and chiefly upon dominoes. There is also, as we have suggested, some betting on football matches and on horses, but (and this seems to us a curious distinction) betting upon horses is much more common among boys engaged in the regular trades than among street-traders.

an example.

An instance will show how strong the love of gambling is. A newspaper seller who, yielding to persistent advice, had gradually saved £1 out of his earnings, entrusted the sum to one of ourselves. A few weeks later he withdrew the money, and went to the Liverpool Races, where he lost every penny. He returned to Manchester on foot, destitute, and continued starving till he had sold some newspapers once more, and gained enough to provide himself a meal. It might have been expected that he had learnt a lesson, and that gambling and betting would for the time at least have lost some of their usual charms. But his argument was exactly the reverse. The money lost and the hardships endured were in his judgment a small price, which he would willingly pay again, for the keen enjoyment which he had had. The only uncommon feature in this case is the large amount of the single sum ventured and lost: smaller sums, all the surplus in fact above living expenses and something for the music hall or the theatre, are daily employed or wasted in this way, not by a few boys of this class, but universally. We have never met or heard of an exception. This is the rule of life; this relish is bought by all to savour the insipidity of existence. The life of these boys is insipid, for their interests only stimulate, without satisfying their craving for excitement.

Drunkenness is rare among these boys; they have a high standard of generosity; they do not lack a kind of urbanity; they are remarkable for their *savoir faire*; they are in many ways attractive; but the closer our acquaintance grows with them the more overwhelming does this propensity to gambling appear. Indeed, it may reasonably be said that the whole career of the street-trader is one long game of chance.*

* The following example will give colour to the statement:—

It has been observed that street-boys engaged in any of the trades which we have treated occasionally pass from their habitual trade to some other, and that from time to time they sell "novelties." The profits on the sale of novelties are often very great. We were surprised to find that they could reach the figure which they touched last week. For some years past it has been our custom to keep a kind of bank for street-traders living in several lodging-houses. The bank is regarded by them as a purse, and withdrawals can be made at any time without notice. We have not yet succeeded in persuading the boys and men to leave their money for any long period in the bank, but many of them entrust us with small sums, from a penny or a few pence up to two or three shillings, for a few days, or in exceptional cases, a few weeks. On Saturday last, besides many smaller deposits, the following sums were put into the bank:—A., £1 15s.; B.,

The origin of the evil is the dulness of their lives—the want of quiet sources of pleasure. Whatever standard they may have reached in the schools, they have not learnt anything which interests them. And what they have learnt is not enough to sell in the market. We do not, indeed, think that they would be morally or intellectually the better if their parents had apprehended the fact that a better position with more stable work can be secured by boys who have attained a higher place in the schools, and had urged those, who are now street-boys, to work more regularly at school with the hope of so tangible a reward to be won in after years. But the fact is noteworthy that many of the largest employers of labour will not accept a boy who has failed to pass the sixth standard at school. Even the “nippers,” or tailboys, who work with railway carters, are by preference chosen from those who have reached this level. The best kinds of employment are closed to boys of the educational level represented even by those street-boys who have done best in the schools. A more rigorous enforcement of the school attendance regulations would tend to decrease the numbers of street-boys. It is easy to imagine—what can, indeed, be seen by those who look at all carefully into the subject—how strongly and how banefully the nature of their employment and of their amusements and excitements reacts upon their character, robbing it of vigour, and stability, and honesty. They tend to become more and more unwilling to work hard; they are the creatures of accident, and lose the power of foresight; they never form habits of thrift; and their word can be taken only by those who have learnt how to interpret it.

In effect, the various classes of juvenile street-sellers form a section of the population untouched by education. They have attended the schools with greater or less irregularity; and they can write a little, and can read halfpenny sensational stories, the comic or the sporting papers—their only literature; but, setting aside these results, they seem to be unaffected by such training as the schools supply. This suggests another inference. If these boys were forced to attend the schools more regularly and for a longer period, they would, no doubt, be the better for the disci-

£2; C., 15s.; D., 10s.; E., 8s., and these sums represented the greater part (but only a part) of the takings by the several boys on Saturday afternoon and evening last (March 10, 1900) by the sale of buttons stamped with portraits of Lord Roberts and other generals engaged in the South African war.

For A. and B., whose ordinary work has for some years been that of news selling, we recently found some regular work at 10s. a week. Both of them threw up the work very quickly. Now, after such success as that of last Saturday, they are more firmly convinced than ever that regular work is economically worse than the irregular work of the streets. We said the sums deposited in the bank were only part of the takings of the boys, for they kept enough in their pockets for current, and perhaps some extra, expenses. It is noteworthy, further, that the sudden access of wealth did not encourage drunkenness among the boys. E., whose takings were smallest, was perhaps slightly under the influence of intoxicants. All the others were perfectly sober. In this respect, as in others, the boy street-traders are greatly superior to the men.

The dulness of life.

These boys have learnt nothing at school which interests them.

The large employers of labour select boys from the number of those who have passed the sixth standard.

The reaction of the circumstance of a street-boy's life on his character.

Variety of
interests
needed in
school work.

pline. But mere attendance at school is not enough. There is not enough variety of work in the schools; the children are treated in too uniform a manner. We remarked earlier that many newspaper sellers enter the Militia, and are happy in it. They are improved by the training supplied, not only physically but morally. These boys can never be taught the lessons of self-control and obedience and perseverance by book teaching. They need plenty of manual work, with physical exercise, under quasi-military authority. To this they respond; the ordinary schoolmaster is merely their enemy, the object of dislike or contempt, or both. The success won by the Certified Industrial Schools is due to the fact that they recognise this principle—a principle an earlier application of which would, perhaps, make the Industrial Schools themselves a less necessary institution than they at present are.

Street-boys
and the
Police.

When street-boys fall—and they frequently fall—into the hands of the police, it may well be doubted whether the punishments which they receive for various offences, obstruction being the most common, serve a beneficent end. Imprisonment degrades and hardens these boys; it has little or no power as a deterrent from crime. Moreover, the punishments do not appear to us to be sufficiently well graduated. Two or three boys, let us say, who happen to be standing talking together in the street, are arrested for obstruction, and sentenced to seven days' imprisonment. The same boys apprehended on another occasion with cards in their hands, and in the act of gambling, are again sentenced to the same term of imprisonment. The boys naturally decide that it is as well to be hanged for a sheep as for a lamb.

Punishments
should be
differentiated.

If gambling were watched and severely punished in some suitable way, not only would those who are already street-boys be less likely to pursue this form of amusement; but many lads would be deterred from coming upon the streets at all; for it is not less true than surprising, that it is the facility which street-trading offers for gambling, which attracts many boys to enter upon street-work. The passion for gambling is so widespread and so deeply-seated.

If young offenders were sentenced to the performance of a certain amount of manual work, to be done under humanising conditions, and if they were kept apart from adult criminals they would, we believe, profit by the experience. To be forced to work up to the point of weariness would be a lesson not easily effaced from the memory. Punishment ought to be instructive as well as retributory; and mere incarceration teaches nothing. Even birching is better.

The new
Liverpool
scheme for
regulating
street
trading.

A very valuable scheme for regulating street-trading by children has recently been put in operation in Liverpool. The new provisions came into force on June 1st, 1899, and they are already passing out of the region of promising experiment into that of established usefulness. We quote, by way of conclusion, a concise summary of these regulations.*

* From an article entitled "New Liverpool Bye-Laws Regulating Street-Trading," by H. Chaloner Dowdall: *Economic Review*, October, 1899.

- " 1. No boy under 14, nor girl under 16, may trade in the streets without a license. *Penalty*—The person who has custody of the child may be fined 20s., and the child may either be summoned or immediately arrested and taken to a "place of safety" (that is to say, a certified shelter-home or the workhouse). The magistrates may thereupon make an order, either (a) transferring the custody of the child until 16 to a proper person, or (b) sending the child, if under 14, to an industrial school.
- " 2. Licenses are granted to children over 11 intending to trade in the streets and fit to do so, provided that the consent of their parents or guardians (if respectable) has been obtained.
- " 3. The license is accompanied by a numbered leather belt, which the child must wear when trading. If the child is exempt from school attendance, the belt has a brass clasp; if not exempt, a bronze one.
- " 4. The license is granted on the following conditions:—
 - (a.) No trading after 9 p.m.
 - (b.) No trading after 7 p.m. in the winter months, except by boys who are exempt from school attendance.
 - (c.) (d.) and (e.) The child to be decently dressed, and to wear and preserve the belt.
 - (f.) No trading in public-houses.
 - (g.) No obstruction, annoyance, or importunity to passengers.
 - (h.) No trading by school children during school hours.
 - (k.) School children to produce quarterly a certificate of regular attendance.
 - (l.) All city bye-laws to be obeyed.
- " 5. The license may be suspended or revoked if any of the conditions upon which it is issued is broken, or if the holder is convicted of crime, or fails to notify any change of address, or if the license is used for begging or other improper purposes.
- " 6. The City Council may, out of the rates, provide suitable lodging for the license holders."

The scheme seems to be admirably drawn to meet the circumstances and character of the people for whose benefit and control it is framed. It would gain a completeness, which at present it

lacks, if the magistrates had the power of transferring young street-traders from unsuitable dwellings to the suitable lodgings which they are enabled to establish.

The registration of the children, the control exercised over their parents, and the arrangement for enforcing obedience to the city bye-laws without recourse to criminal proceedings are all provisions the value of which cannot be set too high.

E. T. CAMPAGNAC.

C. E. B. RUSSELL.

March, 1900.

SKETCH OF THE HISTORY OF EDUCATIONAL WORK IN THE LATE SOUTH AFRICAN REPUBLIC.

EARLY LEGISLATION.

The first education law of the South African Republic was published in 1874, during the presidency of Mr. Burgers. The law provided for three classes of schools:—

1. Wijksholen (Ward schools) [a ward is a field-cornet's district].
2. Distrikscholen.
3. Gymnasium (at Pretoria).

The syllabus of instruction for the Wijksholen corresponded very nearly to that fixed at that time by the English Code for elementary schools. The curriculum of the district schools was slightly more extended (*meer uitgebreid*). In the wijk schools the State subsidy was £25 for 12 children, £50 for 25 children, with £2 additional for each child up to 100. The law provided that—

(a) No religious instruction was to be given during school hours.

(b) Instruction was to be given in Dutch or English, according to the wishes of the parent or guardian.

The main defect of the law was the arrangement with regard to district schools. The population was small and scattered, and it was common to find a district school, with ten or a dozen pupils, costing the Government £300. In 1877, the first year of the British occupation, the average number of children in the schools was 306, and the cost to the State was £11 8s. 9d. per head per annum.

In view of the condition of the State exchequer at that time it is not surprising that the authorities took fright, and in 1880 we find the Administrator, Sir Owen Lanyon, revoking law No. 4 of 1874, and confirming a new education law dealing mainly with the payment of subsidies. The terms "Wijk" and "Distrikt" were abolished, and schools were thenceforth known as "town" and "country" schools. Schools, again, were divided into three classes, according to the attendance and the qualifications of the teachers. The State subsidies for first, second, and third class schools respectively were 7s., 6s., and 4s. per month. Country schools must have at least 12 pupils, and town schools 20, before they could earn subsidies. Secular instruction only might be given in schools. This law was in operation until the middle of 1882, in which year there were 9 town or village schools and 34 country schools, with an attendance of 872 children.

PERIOD 1882-1892

In March, 1882, a new education law was published. In this law all local distinctions disappear, there is only one class of school recognised, *lager* (lower) and *middelbaar* (middle) education are recognised, and the scale of subsidies ranges accordingly. "*Lager onderwijs*" corresponds roughly to Standards I., II. and III. in the English Code, and "*Middelbaar*" corresponds to Standards IV., V. and VI. The State paid £3 for each pupil grouped under "*Lager*" and £5 for each pupil grouped under "*Middelbaar*" per annum. A further subsidy of £3 or £5 per annum was allowed on account of children whose parents were unable to pay fees. The law differed from previous enactments in the following important points:—

(a) School must be opened and closed by prayer. Bible history is to be taught, but doctrinal instruction is to be left to the *Kerkraad*.

(b) Clause 7 stipulates that instruction shall be given through the medium of the Dutch language.

So far as numbers may be taken as a criterion, education made progress under this law. In 1882 the number of children in State schools was 872 with an expenditure of £2,753. In 1891 the number was 8,170, and the cost to the State £43,823 11s. The reports during this period were carelessly compiled, but they afford sufficient data to prove that the attainments of the children were very low. A large sub-standard with a few children in Standards I. and II. was a common type of school. There was, moreover, no thorough system of inspection. In 1888 only 74 out of 179 schools were inspected. There is, further, evidence to show that the annual inspection, when it did take place, was of the most casual and superficial character.

There were constant complaints in the *Volksraad* as to the incompetency of teachers.

In his first report to the *Volksraad* in 1892, Dr. Mansfelt says:—"Burghers are paying in the way of fees and subscriptions less than one-half of the amount of the State subsidies. In one school there are 90 out of 100 children being educated entirely at the expense of the State.

"School buildings and furniture are for the most part in a bad state of repair.

"Teachers are holding positions owing to personal influence without regard to their qualifications. There are teachers who are unable to sign their own name properly, who cannot spell the words '*Pretoria*' or '*Potchefstroom*' without a mistake, and who do not know the difference between a noun and an adjective. Out of 538 teachers only 105 have teachers' certificates."

On the other hand, Mr. Ode, Secretary to the Education Department, 1890-92, denounces the inspectors as incompetent and as holding qualifications vastly inferior to those held by many teachers whose schools they were appointed to inspect. "Four out of five of the inspectors," he says, "have not the

qualifications that would enable them to take charge of the lowest class of school in Holland."

It is possibly owing to this laxity or leniency of administration that we have to ascribe the fact that up to the year 1892 the various nationalities living within the borders of the Republic were treated exactly alike in respect to education. The discovery of the Witwatersrand Gold Fields brought to the country thousands of Europeans, mostly English-speaking, and had the clause of the law of the year 1882, which provided that Dutch was to be the medium of instruction, been rigidly enforced, it would have borne hardly upon the new comers. It is difficult to determine how far the Volksraad connived at this evasion of their enactment, but the fact remains that there were numbers of schools in Johannesburg, Pretoria, and other centres of population, wherein the medium of instruction was almost wholly English, and which were in receipt of State subsidies on equal terms with the purely Dutch schools.

THE HOLLANDER REGIME.

In June, 1891, Dr. Mansfelt, a Hollander teacher from a school in Stellenbosch, was appointed to the post of Superintendent of Education. Judging from his first report it would appear that Dr. Mansfelt conceived himself as being entrusted with a twofold mission: (1) the reorganisation and purification of the educational administration, and (2) the suppression of the use of the English language throughout the schools of the Republic. Dr. Mansfelt's criticism of the schools as he found them has already been noted; to understand his attitude towards the use of the English language in schools it is necessary to glance at a few terms of the education law which he drafted after a few months' study of the country. Law No. 8 of 1892 differs from the law of 1882 principally as follows:—

1. Subsidies for "Lager onderwijs" are raised from £3 to £5, and for "middelbaar onderwijs" from £5 to £7.
2. All teachers must be members of a Protestant Church.
3. All lesson books must be written in Dutch. Not more than three hours per week in Standards I.—III., and four hours per week in Standards IV.—VI. may be devoted to instruction in a foreign tongue.

It will be noticed that (2) at once excludes Roman Catholics and Jews from any chance of participation in State subsidies; that (3) excludes from State schools all English-speaking children including many from the Cape Colony who would find it more difficult to receive instruction through the medium of the Dutch of Holland than through the medium of English.

This clause was much criticised. Many Dutch people complained that for lack of a knowledge of the English language their children would be cut off from opportunities of employment for which they otherwise would be eligible. But Dr. Mansfelt stuck to his guns, and in a subsequent report we find

him fulminating against the foolish claim of parents to have their children taught English as being fraught with serious consequences to our "national existence." In explaining a falling off in attendance he has to admit that certain Dutch parents, deeming the time allowed by law for instruction in English too short, have sent their children to schools where they can get "fuller scope for their shortsighted desires."

When the draft of Dr. Mansfelt's law was published there was great consternation amongst those interested in education on the Gold Fields. Deputations were sent to Pretoria to see Dr. Mansfelt and members of the Government. This agitation resulted in the passing of a Volksraad resolution according to the terms of which, subject to conditions, children in schools in which the medium was other than Dutch might earn a subsidy of £4 per head per annum. The conditions are the interesting feature of this besluit:—

1. The clause in Law No. 8 of 1892, which provided that teachers must be members of a Protestant church, still held. Thus Roman Catholics and Jews were excluded from any benefits to be derived under the resolution.
2. Children under six years of age were ineligible for grants.
3. Children of Dutch-speaking parents were excluded from earning this grant, the Government arguing that their place was in a Dutch school.
4. Children not excluded under 1, 2 and 3 had to satisfy the Dutch inspector in an examination in the Dutch language and Transvaal history. The Dutch teacher had first to be approved by the Education Department.

As the Uitlander schools were mostly small, rarely exceeding 100 children (the attendance in the majority of cases being below 50), it was found that the percentage of children able to satisfy the conditions was so small that the amount of grant earned was insufficient to pay the salary of the Dutch teacher. Only large schools with few young children and with a minimum of the Afrikaner element could hope to earn anything under the besluit. Several schools in endeavouring to earn this grant sustained financial loss. During the 8 years the besluit was in operation the average number of children earning grants in accordance with its terms was less than 200.

The effects of the new legislation were observable in other ways. In 1891 there were 99 town schools and 453 country schools with 8,170 children drawing State subsidies. In 1893, after Dr. Mansfelt's law had been in operation for 18 months, the town schools had been reduced to 59 and the country schools to 353, whilst the total number of children was only 5,909. When it is observed that there was a falling off of something like 40 per cent. in the town schools, it may easily be inferred (as was the case) that the bulk of the 2,261 children turned out of school, or deprived of State subsidy, were the English-speaking children living in Johannesburg and around other centres of population. One or two good voluntary schools in Johannesburg

absorbed some of these children, whose parents were able to pay the high fees; the private adventure schools sprang up for the benefit of others; many children were left in the street. This serious condition of things was much aggravated owing to the influx of new population in 1894 and 1895. Public attention was, from time to time, drawn to the matter by bodies like the Transvaal National Union, but it was not till 1895 that any practical steps were taken.

THE COUNCIL OF EDUCATION.

In April, 1895, Mr. H. S. Caldecott, a leading Johannesburg solicitor, read a paper before a meeting of influential Johannesburgers, in which he called attention to the deplorable state of things brought about by the educational neglect of the Government. Mr. Caldecott's revelations evoked profound attention, and before the meeting closed considerable funds were subscribed. A number of gentlemen, with the corporate title of "Council of Education, Witwatersrand," were elected to administer these funds in the interest of the neglected children, especially those on the mining areas. The first act of the Council was to appoint a Director, who entered upon his duties in September, 1895. This gentleman was forthwith instructed to make a survey of the mining areas of the Witwatersrand, and embody his observations in a report. It was necessary not only to ascertain approximately the number of children not attending school, but also to gauge as nearly as possible the value and extent of the voluntary educational work already being done among Uitlander children. The Council's report revealed the fact that on the mining area—roughly 40 square miles—there were some 2,000 English-speaking children of school-going age, whilst there was not throughout the whole area a single school that might be described as efficient. A common type was a collection of children numbering from 20 to 40, and of varied attainments, crowded into a single room of a dwelling-house and presided over by a lady whose qualifications would hardly have enabled her to pass a fifth standard examination. In one case 130 children were found crammed into a room 18 ft. by 30 ft. A large number of the mines children were not attending any school. In Johannesburg itself, including half a dozen mines in the immediate vicinity, there were 55 Uitlander schools. Of these, 13 were housed in regular school buildings, 18 in churches, and 28 in rooms of private dwellings. Out of 187 teachers, 46 held teachers' certificates. The number of children of school-going age was estimated at 6,500, of whom nearly 2,000 were not attending school.

The Council's report recommended:—

1. The providing of school accommodation and efficient teaching on the mines.
2. The subsidising and controlling of deserving schools in town in the interests of the artisan population.
3. The erection and maintaining of poor schools for the children of those unable to pay fees, irrespective of nationality.

To carry out this scheme would have involved a capital expenditure of about £60,000. It was clear that so large a sum was not likely to be forthcoming from individual donors, and efforts were made to interest the Chamber of Mines in the matter. The Chamber met the Council's advances in a friendly spirit, and, having approved of the scheme, drew up a scale of assessment, subject to which the mines were recommended to furnish the Council with the necessary funds. The Jameson raid occurred at this juncture, and the political uncertainty of the subsequent months made it impossible to press the mines to give effect to the Chamber's recommendations.

Meanwhile the Council had taken steps to have its status in the Republic defined. A trust deed was drawn up, providing that the gentlemen elected at the public meeting of April, 1895, and who signed the Deed of Constitution, were to form the first Council. Members were elected for life. The Council was empowered to co-opt members to its own body to fill vacancies caused by resignation, absence from the country, &c. Provision was made for trustees, in whom the Council's moneys and property were to be vested. The Council was empowered to found and support schools, to support schools not founded by the Council, to support or assist technical or night schools, endow bursaries, and generally to further education within the area of its operations. The sphere of operations was restricted to the Witwatersrand, but might be extended to any other part of the Republic by resolution of Council. The deed was registered at Pretoria in March, 1896.

The unrest of the first months of 1896 was followed towards the end of the year by a sense of impending reforms which rendered impossible the prosecution of the Council's scheme as laid before the Chamber of Mines. Rumours regarding the appointment of an industrial commission suggested the possibility of general emendatory measures, and it was thought by some that heroic voluntary effort in the cause of education would, at this time, be equally impolitic and unnecessary. The state of things educationally, as revealed by its investigations, was, however, too serious to allow the Council to be greatly influenced either by the unrest or the ensuing optimism, and it was resolved to get to work and make the most of the available funds—some £10,000 subscribed at the public meeting of April, 1895. Accordingly, regulations were drafted, subject to which assistance might be dispensed to deserving schools, and a code of instruction was drawn up. Before the end of the year (1896) the Council had three school properties of its own, and had assumed the control of, and financial responsibility for, three others. No effort was spared to make these schools efficient; only trained and experienced teachers were employed; buildings were improved and furnished with the most approved equipment. In the selection of sites great care was taken not to overlap, or interfere with, other efficient voluntary work. Good schools, not under the Council's direct control, were strengthened by grants varying from £25 to £100. Working on these

ines it was hoped to get the maximum of result from a minimum of expenditure. The Council, moreover, undertook the inspection of, and reported on, schools not otherwise connected with it, and the adoption by these and other schools of the Council's code of instruction gave a measure of uniformity of aim to primary education on the Witwatersrand.

Whilst the Council was engaged on the work described above, strong representations were being made as to the need for instruction in chemistry and assaying for the benefit of young men engaged in the cyanide works and assay offices on the mines. The Council took the view that after a little nursing, work of this kind might be rendered almost self-supporting, and the services of a thoroughly qualified man were obtained from England to inaugurate the experiment. In January, 1897, classes in physics, chemistry, and assaying were opened, a class-room and laboratory having in the meantime been thoroughly equipped. The physics and chemistry classes were largely attended by teachers and pupils of Johannesburg schools who were desirous of qualifying for the examinations of the Cape University, but most of the students in chemistry and assaying came from the mines. Many of the latter travelled long distances to the classes after doing their shift on the mines, and the majority never completed their course. Consequently revenue in the shape of fees from this source was an uncertain and diminishing quantity. The strain of permanently devoting considerable subsidies to these classes, in view of the paramount importance of the other educational work, was more than the Council could bear, and the classes were closed after running for a year and a half. The Council, however, had the satisfaction of seeing several of their students obtaining good appointments on the mines.

During the early months of 1897 the opportunity of acquiring suitable premises at a reasonable cost enabled the Council to carry out its desire to establish a High School for boys. Certain existing school premises were purchased and enlarged. The building was completely furnished with the most modern furniture and apparatus. Highly qualified teachers were appointed, and the school opened with about 30 boys. Within a year the school, with an attendance of over 100, became self-supporting, thus justifying the considerable initial expenditure. During the last quarter of 1897 the Council's schools were as follows:—

Science classes	-	attendance	-	29
Jeppestown school	-	"	-	131
Booyesen's school	-	"	-	76
Braamfontein	-	"	-	123
Brickfields	-	"	-	307
Boksburg	-	"	-	71
Springs	-	"	-	35
City and Suburban	-	"	-	47
Total attendance				819

The amount paid in subsidies per annum, and not including administrative expenses, was £1,663 15s. £714 of this was absorbed by the science classes, leaving £949 15s., or a little over £1 4s. per pupil, for the schools proper.

EDUCATIONAL LEGISLATION FOR UITLANDERS.

Meanwhile the State Education Department had manifested considerable alarm at the publication of the Council's report in 1895. An Uitlander Education Law was immediately promised. This law, which was published in August, 1896, was a travesty of a remedial measure; it was simply an instrument for transferring the control of educational matters, as far as related to the Uitlander, from the Volksraad to the Government and Superintendent of Education. The Council, knowing the inveterate hostility of the Superintendent of Education to the British section of the Uitlander community, took exception to the plenary powers entrusted to this individual. Events proved that the Council's apprehensions were well founded. A representative committee, consisting of African Dutch, Hollanders, Germans, Americans, and English, was appointed, ostensibly to administer the new law. This Board soon realised that its functions were merely nominal and that the names of its members were being used to cloak the furtherance of a retrograde educational policy. After six months the Board resigned in a body.

What the policy above referred to was, soon appeared when certain regulations under the new law were issued from Pretoria. From these regulations it appeared—

1. That the qualifications of the teachers of the new schools were so limited and defined as to make it impossible for anyone but a Hollander to become headmaster.

2. That a child during his first year in school was to devote one hour per day to instruction in Dutch (the Dutch of Holland), in his second year two hours, and in his third year three hours; whilst in his fourth year he was expected to take the whole of his instruction through the medium of that language.

When these regulations were published the Council, knowing how limited was the school life of the average child, again protested vigorously and called the attention of the British agent to the matter. Dr. Mansfelt was in the meantime experiencing difficulty in getting a supply of Hollander teachers qualified to become heads of schools where the children were mainly English. This difficulty was surmounted by the somewhat unique expedient of getting a law passed to enable teachers to proceed to England from Holland to learn the language at the cost of the State. Ordinary travelling expenses had been passed *pari passu* with the Uitlander Education Law in 1896.

The schools under this law had very little effect upon the educational situation. According to Dr. Mansfelt's latest report

there were seven schools under the law throughout the Republic. In one the children were almost all Dutch; in three about half Dutch and half English; three were wholly English. The average attendance in the seven schools was 540. Apart from administration and building expenses, these 540 children cost the State £7,240, or £13 8s. per head, during 1898.

THE COUNCIL AND THE EDUCATION DEPARTMENT.

Although the Council took occasion to criticise abuses and anomalies in the educational laws of the State, it is not to be assumed that its attitude towards the Education Department was irreconcilable. On the contrary, several attempts were made to meet the Department with a view to discussing matters and arriving at a *modus vivendi*. The Council's approaches, however, were invariably met with scorn and contumely. Friendly relations were cultivated with moderate Dutchmen, interested in education, as well as with the committees of some of the State schools in the vicinity of the Gold Fields, many of the latter receiving from the Council assistance denied them by their own Department. Direct application to the Department having failed, the Council in the beginning of 1898 endeavoured to approach the Government through the medium of certain Johannesburg burghers, the Mining Commissioner and Burgo-master undertaking to carry a letter from the Council to Pretoria. No reply was vouchsafed to this letter.*

STATE EDUCATIONAL STATISTICS.

At this point it will be interesting to note some figures from Dr. Mansfelt's report for 1898, published September, 1899. The average number of pupils in the State schools during 1898 was returned as 14,940. The total State expenditure, including about £21,000 for buildings, reached the enormous total of £226,416, or about £15 3s. a head. In Cape Colony for the year ending June, 1899, the average attendance was put at 107,783, the total cost to the Government being £270,758 6s. 9d. or about £2 10s. 2d. a head. The actual cost to the Colony of the education of white children, as distinguished from coloured, for the same financial year was roughly about £3 5s. per head.

The most extraordinary item of the educational figures of the South African Republic is that of "logiesgelden" (lodging money). By a law passed in 1896 it was provided that poor parents living more than three miles from a school could arrange with the school committee for lodging their children, the State undertaking to pay a sum varying from £12 to £18 per annum. Taking £15 as the average payment on this account, it thus appears that in 1898 over 3,000 children were being wholly or partially maintained at the expense of the State, the total sum expended under

* See Appendix.

this head being £45,355 17s. 1d. Under the heading "children of indigent burghers" comes the item of £40,675 11s. 8d. This is the year's expenditure under a law authorising the Government to pay school fees for poor parents. The sum represents the school fees of 5,084 children at £8 per annum. Taken together, the above two items show that during 1898 the burghers of the State received gratuities from the public funds amounting to £86,031 8s. 9d.

Other noteworthy items appear in this report. Among them may be cited bursaries paid to students in Holland amounting to £7,162 6s.; the State Mining School with 4 students at £261 13s. 3d. each per annum; and the Gymnasium with 88 pupils at £88 12s. 9½d. each per annum.

The increase of over 6,000 in the attendance since 1892 is not difficult to understand in view of the fact that more than 7,000 children were either being lodged or having their school fees paid at State expense. The attainments of the children, however, in view of this large expenditure, are disappointing. Of the children in standards 56·2 per cent. were in Standard I., whilst the percentage in Standard VI. and over was only 0·3. In the Cape Colony for the same year the figures were, for the same groups, 29 per cent. and 5·6 per cent. respectively.

PRIVATE VOLUNTARY WORK IN JOHANNESBURG.

In Johannesburg, during the years 1895-98, excellent educational work was being done by a few private and entirely unaided schools. Some of these schools were well equipped, being furnished with gymnasia and apparatus which would compare favourably with that of the best European schools. The fees in these schools were necessarily high, ranging from 15s. to 40s. per month. The attainments of the children were good. During the four years under review the average number of pupils entering for the Cape University School Examinations was 130, and the percentage passing in the upper divisions was high. The Cape examinations, and examinations held under the auspices of the Council of Education, showed that the position of the children in all the standards was much higher than in the State schools, approximating much nearer to the Cape percentage. The Johannesburg Kindergarten Association, started in 1897, was doing a good work amongst infants and younger children.

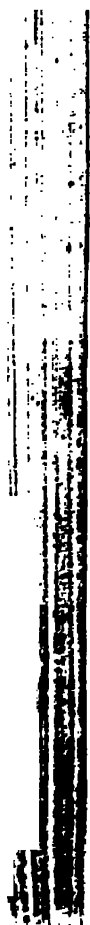
LATER WORK OF COUNCIL.

During 1898 the Council, subject to certain guarantees, handed over the school in Jeppestown to a committee of parents of the pupils attending the school, the committee undertaking all financial responsibility. During the same year the Council opened a school at Luipaards Vlei, which after a few weeks showed an attendance of 35. During this year the English school at Krugersdorp was also taken over by the Council, the school having an average attendance of 90.

Towards the end of this year it was considered that the time had come to make a strong effort to augment the Council's funds with a view to extending operations. It was resolved to attempt to resuscitate the original scheme of 1895 in its entirety. A letter was forwarded through Mr. Percy Fitzpatrick to Messrs. Wernher, Beit & Co., and other financial houses in London who were interested in the Witwatersrand, setting forth the then existing situation, and indicating the work that had been done by the Council in the past. The facts revealed by this letter evoked considerable attention in London, and the appeal resulted in subscriptions amounting to nearly £100,000 being paid into the Council's funds before April, 1899. In view of the increased educational needs, consequent upon the augmentation of the mining population since 1895, the Council resolved, if possible, to reserve this fund entirely for purposes of capital expenditure, and the mines were asked for contributions towards annual maintenance. The mines were asked for £17,000 per annum, and up to September, 1899, nearly £13,000 had been guaranteed for a period of three years. A scheme involving the erection of upwards of 20 school buildings on the mines was prepared, and the Council was engaged on the arrangement of plans and the selection of building sites when the imminence of war put a stop to the work; and under the new conditions which will be established in the Transvaal it is not now possible to say what, if any arrangements in the direction of elementary education may be made by the Council in future.

JOHN ROBINSON.

March, 1901.



THE EDUCATION OF ASIATICS

"I grant that the present age is one of learning.
But while knowledge waxes, understanding wanes ;
A man can now count the stars in the heavens
But fails to perceive the impure on his own face."

From a Malay Poem ; Marsden's Grammar, p. 211.

The most zealous supporters of our system of public instruction in the East will admit that its success is often questioned. It is said to be impractical, to make the people litigious and arrogant, to inspire a distaste for manual and technical work, and to create a class of literary malcontents who are useless to their communities and a source of trouble to the Empire. Vernacular education is sometimes condemned as a hindrance to the introduction of a common language and as bestowing knowledge which has no commercial value. Female education is also opposed as "unsexing" native women and unfitting them for domestic duties. Much of this hostility is ignorantly expressed, much blame is laid at the wrong door, and many of the remedies proposed are astonishingly foolish. A Chinese gentleman, for instance, once informed the writer that he hoped to secure for his sons the advantage of an English education without its corrupting influence by sending the boys to school but repressing any inclination to study which they might evince. Yet behind all this ignorant criticism there remains the important fact that many intelligent men of the world, both Asiatic and European, though unable to exactly locate the evil, feel that something in our system is unsound.

English courses of instruction generally end with an examination and a table of "results." These "results" are deceptive in that they show the influence of teaching on memory rather than on mind. Chinese students at Cambridge, for instance, usually elect to be examined in Paley's "Evidences of Christianity" in preference to the harder alternative allowed them as non-Christian candidates. Their success in passing the test is not accompanied by any modification of their religious creeds. It is possible that many of the pupils at our Asiatic schools accept Western teaching much as their seniors accept "Paley." They find it opposed to their ancestral traditions or to their religious beliefs; they submit to the necessity of passing examinations in it; but they fail entirely to assimilate it. Their teacher, having no sympathy with their doubts and being accustomed to easy triumphs at home, fails to influence his pupils, or if he silences

them, he leaves them in the proverbial condition of men convinced against their will. Hence it is that statistical "results" are most misleading. Sanitation is studied, but the people, after instruction, often show no confidence in Western ideas; they shun the hospitals and stone the doctors. Literature is taught; but no native literature springs up, or what springs up is unwholesome. The teacher in his defence points out that nothing untrue or unwholesome had any part in his curriculum. If we admit this, the fault must lie in the method of instruction adopted. One man inspires his pupils with an interest in all that he tells them; another only instils into them an invincible aversion to the science which it is his honest wish to teach.

The true results of public instruction no doubt differ widely in various colonies and dependencies according to the codes and systems followed and according to the national character of the peoples influenced. A complete analysis of such results could only be made after prolonged local investigations, but examples from the case of one colony may be advantageously considered as an illustration of the difficulties met with and of the success or failure of the efforts made to overcome them. The population of the Straits Settlements is made up of numerous elements, including (in considerable proportions) three typical Asiatic races—Chinese, Malays, and Tamils. There is no sameness about these three. Patient literary study has played so great a part in the past life of China that the Chinese boy may be almost said to be a scholar by heredity. The old Malays, on the other hand, a race of planters and fishermen, paid very little attention to book-learning, but were keen observers of nature and natural phenomena. They distinguished, for instance, between three kinds of mosquitoes, noting the difference between the *culex* and the *anopheles*, and giving to the latter the name of the "fever mosquito." Malays and Chinese may therefore be fairly considered to represent extreme differences of national character, and the general effects of our educational system upon each race is worthy of remark.

The sudden establishment of a modern settlement in an old-world community such as that of the Malays brings about great social changes. To the people as a whole it brings a certain amount of economic prosperity. To some individuals it brings evil. It destroys many native handicrafts, and so ruins men deservedly held in good repute for skill and industry. It establishes a demand for people willing to serve the foreigner, and disproportionately benefits such persons as compared with the independent worker and the peasant proprietor. Thus the men respected by the old community are not those who acquire the most wealth by the change. In the words of a Malay author (who wrote prior to the establishment of our educational system), the founding of Singapore "made worms out of dragons and dragons out of worms." The effacing of the old social landmarks brought about a demoralisation which it should be the object of public instruction to combat. The influx of undesirable foreign immigrants, usurers, and petty traders not too scrupulous about

taking advantage of popular ignorance, made it desirable that the community should be educated to protect itself. Popular education in the Malay language has now been in existence long enough to enable some conclusions to be drawn as to its success in bringing about such ends.

In some important respects public instruction has generally been successful. The people as a whole seem more intelligent and less liable to be imposed upon by the falsification of accounts or by any swindling which is based upon lack of instruction in its victim. Large classes of petty officials (such as policemen, process-servers, and others) are able to read and write, and to thereby perform their duties more efficiently—and the professional efficiency of the rank and file of administration is, after all, a vital feature in successful government. Unfortunately there are also disappointing features about the present condition of the Malays. No highly-educated class has sprung up among them to lead them on to further improvement.* The talent for observation possessed by the former generation seems to be perishing through disuse; the very names of plants and animals are unknown to the book-educated natives of the present time. The power to read and write does not seem to be accompanied by any desire to do so. The old literature is perishing, and nothing of value seems to be taking its place; indeed, the limited vocabulary acquired in the schools is insufficient to enable their pupils to read the ancient books. Some private inquiries addressed to about fifty vernacular school teachers elicited the fact that a large majority of them had never read any books except those used in their work or for devotional purposes, and that only three of them possessed more than a shillingworth of literature in their private libraries. Again, while the people are shrewder intellectually, scientific instruction has not effaced the old superstitious beliefs. Impostors can still successfully trade upon popular credulity in matters of magic and sorcery. A man lately caused widespread distress in the settlement of Malacca by deluding his victims with the theory that he possessed a kind of yeast which caused notes and cash to expand to larger sums. An absurd story that the Government wanted human heads for burial in the foundations of bridges recently met with general credence. Women who claim to lay eggs, *soi-disant* saints who seem to go without food, diviners who say that they know where the riches of Korah or of Solomon are buried—such are some of the most recent examples of imposture. Meanwhile steps are being taken to improve the standard of education; a Malay training-college has been founded; school libraries have been commenced, and other efforts are being made to meet the deficiencies which have been pointed out. The causes of some of these deficiencies are, however, very instructive.

"The books say the world is round," remarked a Malay teacher, "but anyone can see for himself that it is flat." It should be added that the popular interpretation of a text in the

* This is not the case with other races in the Straits.

Koran supports the view taken by this man. His remark is significant because it indicates the authority upon which he believed the European doctrine to be based. Asiatic ideas of physiography rest on tradition or speculative theory; Western science relies on experiment and calculation. This distinction in the method of research—the vital difference in such cases—is not brought to the pupil's attention. Experiments and practical demonstrations are troublesome and expensive; the use of a "primer" or "manual" requires no special training, and, on paper, may produce equally good results. There is only one school laboratory, for instance, in the Straits Settlements, and any attempt to insist on practical teaching meets with strong opposition. This is to be regretted. It need not be laid down that all science should be taught experimentally; it is only essential that some should. Few Englishmen have ever seen a cholera bacillus; their belief in its existence is based on their confidence in the methods of research which our investigators pursue. Once a similar confidence can be created in the East, Western scientific discoveries will meet with ready acceptance. Meanwhile our teachers have to content themselves with such adhesions to the truth of their theories as the answers in an examination paper can be said to furnish.

The distaste of the modern Malay for reading is due to several causes. Many Englishmen take an unsympathetic and even pedantic view of native books, condemning as worthless the tales of fairies and heroes of which Eastern literature mainly consists. In this way there has grown up a certain antagonism between the new schools and the old learning. Children who are brought up on school-books as their sole intellectual nourishment are apt to associate reading with dull or painful memories. Fairy tales and books of adventure are more likely to lead them on to literary tastes. The Malay boy has no light reading to solace his idle moments. The Asiatic peasant is a poor man and is little disposed to put money into the pockets of publishers. Missionary societies, with the best intentions, often print proselytising books and distribute them either gratuitously or at a price which precludes profit. This policy may serve religious ends, but it does not encourage publication on business lines or stimulate a general taste for reading. Indeed, it brings literature into suspicion. The responsibility of public bodies in the matter of the provision of libraries is beginning to be recognised in England, and might with advantage be extended to the East. In the Straits Settlements, at all events, a few of the old romances have been recently published for the creation of school libraries, but it will be long before this policy (which is somewhat dependent on the interest taken by individuals in the ancient literature) produces any visible results.

This dislike to reading is the more to be regretted because the old Malays, unable though they often were to read and write, were not unappreciative of literary work. The learned man was respected, the itinerant story-teller, rhapsodist, or reader was heartily welcomed wherever he went, and the stage-representations of the

legends always attracted audiences. It is a significant fact that the ancient literature has been handed down for centuries in manuscript form in a country where the ravages of termites necessitate the frequent recopying of books. Nor are the old romances unworthy of attention. They represent, after all, the kind of literature prevalent in England itself in the thirteenth century. They belong to cycles which deal with the exploits of some hero much as our mediæval cycles dealt with Charlemagne, Arthur, or Alexander. Indeed in the last case there is even identity, for the Malay romance of Alexander is based upon the pseudo-Callisthenes story which had so great an influence on the early literature of almost every modern European language. Books of this type may not appeal to the modern Englishman, but they represent the road along which his own culture has travelled, and the destruction of this road will hardly expedite the progress of our Asiatic fellow-subjects.

Modern thinkers concern themselves with more than mere literary and scientific instruction. They devote direct attention to training the powers of thought and of observation, the inventive faculty, the hand, the eye, and the physical frame. From this catholic standpoint the superiority of Europeans over the more primitive Asiatics is not always evident. The division of labour makes a man very dependent on his community and limits his power to shift for himself. In manual dexterity, in quickness to observe and to utilise the gifts of nature, the native of the Indian Islands has much to teach us. Alfred Russel Wallace in his famous work on the Malay Archipelago gives many instances of this. He explains how in Bali gun-barrels were bored by the use of "a basketful of stones," and adds that "when examining one of the handsome, well-finished and serviceable guns, it was very hard to realise the fact that they had been made from first to last with tools hardly sufficient for an English blacksmith to make a horse-shoe." This industry may perish before mechanical competition; the ingenuity and dexterity which it evinces deserve a better fate. Object-lessons are in use in English schools to train powers of thought and observation but they demand exceptional gifts in the teacher and are not always successful. A lesson on the frog, given (in the writer's presence) at a well-known training college, was illustrated by some spawn (which proved to be a snail's), a tadpole, and a full-grown frog (which was really a toad). Transplanted by code regulations to a Malay State, the object-lesson resolves itself into a brief lecture on (let us say) the local buffalo, illustrated by a picture of an English prize ox. Yet the Asiatic can be a most excellent observer. Manual training, again, if carried out on Western lines, necessitates the building of a costly workshop; the native with a few simple tools can develop resource as well as train the hand and the eye.

English training is, however, the department of public instruction to which most attention is being devoted in the Eastern dependencies of the British Empire. It was given predominance over other studies in the days of Lord Macaulay, who held that it was the proper medium through which India

should be introduced to the arts and sciences of Europe. Its success has been extensively advertised by the honours won by Asiatic students at Oxford and Cambridge. The most important practical feature in any system of instruction is the object which prompts pupils to seek it. In this case the native student knows that a knowledge of English has a pecuniary value in itself and is the road to all high advancement. He studies the language as though he were working for a profession, and regards his school as a technical one, the essence of which is that it should turn out master-workmen. His teachers do not always take his view of the question. They hold, plausibly enough, that English instruction should be regarded as a mental training to be diffused as widely as possible, and, to bring about this end, they found cheap schools which often do not teach more than the elements of the language, or they enlarge their classes till proper individual attention is impossible. This policy injures the better schools by underselling them; while by not giving the pupils what they want, it creates a disappointed and discontented class. It is, at least, questionable whether the acquisition of a smatterer's knowledge of a foreign tongue is of serious value as mental discipline. English is beginning to play in the East the part which Latin was playing in Europe when Dante wrote his treatise *De vulgari eloquio*; its undoubted merits as a medium of instruction for the cultured and professional classes are leading its advocates to encroach upon the province of vernacular and industrial education through which alone the masses can be influenced.

The department of English studies has a special interest for the practical teacher owing to the differences in structure, sound and ideology which exist between our own tongue and the languages of the East. Phenomena such as "babu-English" and "pidgin-English" can be traced to the difficulties experienced by various races in trying to master our idioms and pronunciation. Asiatic languages differ greatly. A Chinese-speaking boy meets with all sorts of initial troubles; a Malay is puzzled by our grammar but not by phonetics; a Tamil begins by displaying a certain deceptive fluency. Unfortunately our methods of instruction make no allowance for racial distinctions: the very books in use are those met with in London schools, so that the Malay or Chinese child, at two degrees distance from the equator, reads tales of Christmas trees and of robins playing in the snow. The waste of time and effort under such conditions is enormous. An Asiatic boy is not a profound imaginative thinker able to picture to himself foreign conditions and to apprehend grammatical distinctions which have no equivalents in the indefinite phraseology of his own tongue. He is diligent enough and learns his rules and his inflections by heart, but he can do no more. A practical test (such as that of opening a door and asking the boys to describe the action) reveals the hollowness of the instruction given. "He open the door," "he opening the door," and similar answers will indicate clearly enough how little

reliance can be placed upon mental translations from the vernacular. A Malacca boy, after five years' study of English, gave the following written description of a pig: "He head like dog, he tail like cow, he feather like buffalo." Even in the advanced classes the mechanical spirit of reliance on dictionaries and written definitions of meanings evinces itself in explanations such as the paraphrasing of the expression "his funds were exhausted" by the phrase "his government securities were tired out." Errors such as these cease to be amusing when they point to diligence in the boy and lack of method in his teacher.*

The conditions under which English is taught to Asiatics bear no analogy to those met with in an ordinary London elementary school. They approach rather to the conditions under which a foreign language is taught in our own country or our own language on the Continent. Of course the circumstances are not identical. A public-school boy can only devote two or three hours a week to French or German; a Chinese boy in the Straits Settlements gives his whole time to English. Nevertheless more is to be learnt by the study of the methods of foreign-language teaching than by observation of the instruction given in public elementary schools. The "Special Reports" issued by the Education Department upon the "New" or "Direct" Method adopted in the best German schools have enabled certain experiments to be made (in Singapore) to test the practicability of introducing an improved system of instruction into our Asiatic schools. The general features of the test (which was of a very partial character) may be briefly indicated. A pupil was first taught the names of the objects in the class-room and asked to state in a complete sentence (*e.g.*, "this is a desk") what each was. He then learnt the names of the colours, and by connecting them with the objects in the class-room (*e.g.*, "the desk is black, "this is a black desk") he was introduced to the use of the adjective. He was then exercised in the distinction between the singular and the plural and the use of the words "is" and "are." The prepositions presented no difficulties; an object would be held in some position relative to another and the pupil would be asked to state where it was—*e.g.*, "the book is on the table," "it is over the table," or "it is beside the table," &c. The comparison of adjectives was easily illustrated. The verb was first taught in the imperative, then in the present indicative, the past, and the future—in each case by "action lessons." While elementary grammar was being taught in this way, the use of wall-pictures enabled the pupils to continually exercise their vocabulary and to greatly extend it. Hölzel's series of four pictures, "The Seasons," was used to suggest or explain no less than twelve hundred different words.

* I once saw in a list of definitions dictated by the teacher the following explanation: "Native home—a place where plenty of tea grows." I traced this to a passage in a chapter on tea in which Assam is given as the "native home" of the plant. The unsuitability of both methods and books is always accepted, by unreasoning conservatism, as a necessary factor in the situation.

The experiment, so far as it went, was very successful.* The boys soon began to speak readily and accurately, and took a lively interest in these conversation-lessons. The fear was expressed that the system would be a failure owing to the limited knowledge of English possessed by many of the poorly-paid elementary teachers, but this anxiety proved groundless. An instructor of limited attainments must be supplied with a book in which the proposed course is very clearly explained, and in which samples of questions are plentifully given. Given such a book, he often works very well, having a keen appreciation of his pupils' difficulties and an inexhaustible patience which enables him to do his work with great thoroughness, and to see that the answering of questions is not confined to the more voluble members of the class.

No originality, of course, is claimed for the lines of the experiment. They resemble somewhat closely the "Berlitz" system, and less closely the "Gouin" system, but as a matter of fact they were based on a portion of a work, *The English Student*, by Dr. Hausknecht, of Kiel. Unfortunately the experiment does not go far enough. It is still necessary to prepare a series of "Readers" suited for class use and to devise a succession of object-lessons for improving and varying the vocabulary while training the observation and imparting useful general knowledge. It is also a question whether these conversation-lessons should commence after the mastery of the alphabet and of simple syllabic combinations, or should be purely oral lessons given while the pupil is actually learning his A B C. There is no reason why the latter alternative should not be practically tested under limitations which would make allowance for the pupil's tender years.

The question of the administration of an Education Department in an Asiatic dependency deserves a passing notice. Rules and regulations cannot create good teaching, though they may injure it. A good code is one which allows discretion to the good teacher while controlling the careless and the idle. A code cannot be judged without reference to local conditions, for it exists to meet those conditions. It is often assumed that a liberal expenditure of money suffices to give good public instruction.

* "Owing to my having acted in other appointments and having been away on leave, it was three years when I returned in August and took up my duties since I had last held an annual inspection. I was very much struck by the general improvement which had taken place in the interval in the quality of the teaching at most of the English schools in Singapore. This was, I am glad to say, especially noticeable in the teaching of English to boys to whom it is a foreign language. An attempt is being made in many of the best schools with great success to discard the use of the vernacular as far as possible even in the lowest standards, and the children are accustomed to frame English sentences conversationally from their earliest schooldays."—From the Annual Report (for 1900) on the Education Department, Straits Settlements, by Mr. J. B. Eleum, Inspector of Schools, Straits Settlements.

Indiscriminate generosity may defeat its own ends. A liberal grant for the training of pupil teachers may encourage their employment while under training, and their dismissal when, on becoming useful masters, they cease to be grant-earning units. The English regulations which make only a slight difference (one shilling) in the grant allowed per pupil to a good and to a second-rate school would be unworkable in the East. The average salary of a master in a leading Straits school varies from £100 to £150 a year; in some of the worst it falls to £15 or £20. With a weak administration, or with rules which set little financial premium on efficiency, the poorly-paid teacher will drive out the highly-paid as surely as base coin drives out good. Some headmasters, with an eye to their immediate interests or to the hypothetical hard case which proverbially makes bad law, are anxious to limit departmental control even when it only exists for their protection. "Underselling" may possibly be justifiable when charity makes good the loss in revenue; it is indefensible when it is effected by the underpayment of teachers, the overcrowding of classes, deficiency in equipment and inferior instruction generally. The Asiatic parent is not usually in a position to discriminate between the real educationist and the scholastic charlatan. Only blind optimism will believe that the true interests of a school will never be subordinated to personal ambitions, to missionary aims, to anti-religious bias or to selfish economy. A code, therefore, may leave considerable discretion in matters of detail to headmasters provided it retains for the Government and the general public the necessary checks on the misdirection of public instruction.

The Japanese—the premier Asiatic nation—claim that they have adapted Western civilisation to their needs. They have now ceased to import instructors, and send their own students to Europe to study our institutions and select what is most suitable for the peculiar conditions of Japan. Is it too much to ask that the sympathetic study of educational conditions in the East may precede the imposition of codes and systems of instruction? Such a study should not be a narrow one, limited, as is too often the case, to the results of examinations, as though the value of intellectual soil should be judged by the number of seedlings planted in it rather than by the crop which it can be ultimately made to yield. Nor should the standard be too exclusively national, misjudging Asiatic powers much as a boy of mathematical ability may be pronounced dull in a classical school. There is no lack of talent among our English masters, but there is an absence of that experimental study of real conditions which, by evolving better methods, may increase the efficiency of the average native teacher. The gifted man is content with his own methods which presuppose the existence of talent; he has little but contemptuous criticism for his less fortunate colleagues. The cleverer boys push their way to the front in spite of every obstacle, and, once in the scholarship classes, receive every

attention. The general result may be best summarised in a political simile: We are, at best, creating an Asiatic governing class rather than Asiatic races capable of self-government. Can such a system be considered national, and is it the end which its founders had in view? The study of the people themselves will best supply the answer.

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[INTRODUCTORY LETTER.]

To Sir G. W. KEKEWICH, K.C.B.,
Secretary of the Board of Education.

SIR,

I HAVE the honour to present to you the accompanying report which gives a short account of Education in the Netherlands. It has been prepared by Mr. J. C. Medd, M.A., and will be found to supplement the essay on Primary Education in the Netherlands, contributed by Mr. Reginald Balfour to Volume 8 of this series of reports.

More than once in our history, English education has derived advantage and stimulus from the study of the schools of Holland, and it will be clear to the reader of this report and of Mr. Balfour's essay how much the educational development of the two countries has been affected by the tenacity of religious conviction which has characterised so large a part of both nations.

I desire to take this opportunity of expressing, on behalf of the Special Inquiries Branch of the Board of Education, our thanks for the courteous and generous assistance which Mr. Medd received, in the course of his inquiry, from those who were best qualified to help him in his task. The names of those gentlemen for whose help acknowledgment is especially due will be found in Mr. Medd's report.

It will be understood that, as in the case of other reports in this series, the writer is alone responsible for the opinions therein expressed.

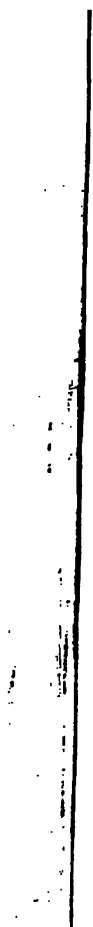
I have the honour to be,

Sir,

Your obedient Servant,

MICHAEL E. SADLER,
Director of Special Inquiries and Reports.

May, 1902.



A SHORT ACCOUNT OF EDUCATION IN THE NETHERLANDS.

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A SHORT ACCOUNT OF EDUCATION IN THE NETHERLANDS.

These notes are based upon an inquiry recently undertaken on behalf of the Board of Education. The desirability of studying certain aspects of education in the Netherlands was first suggested to me by Lord Reay, whose extreme kindness in furnishing me with the best introductions made the conditions for such an inquiry unusually favourable and pleasant. Of late, Dutch schools have attracted comparatively little attention in England. It may be, as Matthew Arnold seemed to feel,* that a country, whose greatness lies mainly in the past, lacks the interest of one whose period of full development has not yet been reached. It is not, however, easy to explain or excuse this indifference. Both politically and educationally we have owed much to Holland, and we may still profit by her example. No nation is more enthusiastic in the cause of education: the reverence for it permeates every class. Again, no nation more closely resembles our own. There is the same tenacity of purpose, the same passion for individual liberty and distrust of the mechanical processes of State control, while the habits of life and modes of thought are not dissimilar. Many of the problems by which we are perplexed have been solved. New types of schools and forms of instruction, suited to modern requirements, have been gradually introduced. At every point the system bears the impress of the national character. It is definite in aim, methodical, and distinguished throughout by sound practical common-sense. It may also fairly claim to go far towards satisfying the educational needs of the people. In several particulars it appeals directly to ourselves. The long struggle, which culminated in 1889 in the frank recognition of denominational schools, shows the futility of attempting to disregard the religious convictions of any large section of a community. All education from the primary school to the Universities has been brought under the supervision of the Government, but there is no spirit of bureaucracy. Agricultural education has become completely organised. In every branch State-aid and local or private initiative are happily combined.

Within the limits of this paper it would be impossible to deal adequately with the system in its entirety. Although the area of the Netherlands is but a fourth of that of England, and its

* Report to the Education Commission, 1861, pp. 154 and following.
6352.

population is less than a fifth—facts to be remembered when estimating the relative importance of statistics—the social and economic condition of the people varies widely in different districts. A personal acquaintance with each of these districts could alone justify the expression of an opinion upon the suitability or otherwise of any particular type of school for such varied circumstances. It has seemed preferable, therefore, to submit a few notes of the more distinctive features of the system, trusting that they may lead others to further investigation. Mr. Balfour* has written so exhaustively upon the causes which led to the legislation of 1889 and 1900, and has so fully described the regulations in regard to the provision of primary education, that it is unnecessary to refer to them here in detail.

PRIMARY EDUCATION.

(Lager Onderwijs.)

Infant Schools (*Bewaarscholen*).—The State does not concern itself with the organization of infant schools, nor does it grant certificates for their teachers. They are left to the care of private societies and the municipal authorities of large towns; the latter have undertaken the work of organization on their own account, and have established special colleges for training the teachers. Probably the best of these is that at Leyden. At Amsterdam, some classes for infants not under five years of age have been annexed to the free public schools. The supervision exercised by the municipal authorities is strict. An example of this may be seen in the Report† on Elementary Education for Utrecht. Full particulars as to the staff, number of pupils, etc., are given. The head-mistress of each school must reply in detail to a series of questions upon the sanitary condition, ventilation, and lighting of the premises, the water supply, the school furniture, and the arrangements of the playground. This information is carefully tabulated for the local School Board or Committee. The Report‡ speaks with warm appreciation of the efforts of the teachers to promote habits of cleanliness, of their devotion to the children, and their ingenuity in devising suitable employments, but the condition of all the schools is not quite satisfactory, several have no covered playground, and the benches are frequently too crowded. One of the best schools is the Joanna School, near the Weistraat, of which Mej. Visée is the head-mistress. She has twelve assistant-teachers, two of whom are qualified by examination to act as head-mistress, and the number of pupils this year is 263. Gardens surround the

* In "Special Reports on Educational Subjects," vol. 8.

† Verslag omtrent den Toestand van het Lager Onderwijs in de Gemeente Utrecht, 1900, pp. 110, 138, and 176.

‡ Ibid. p. 157.

school, which has two extensive playgrounds, and a school-garden with a covered space in the centre. There are five well-lighted class-rooms, where the children are occupied, as usual, in plaiting, drawing, arranging blocks, and so on. No reading or writing is taught at the Infant School. All the benches are provided with backs, and each bench accommodates two children. At the Hague I visited Mevr. van Calcar's small school of 60 pupils, the fees for whom are £2 7s. 6d. a year. It seemed to be excellently organized, and I saw the children perform a variety of exercises with great enjoyment and skill. Some of them were busy in the school-garden, attending to their plants. As a rule Infant Schools have these gardens, and the extent to which "Nature-study" is encouraged throughout the Dutch system, as will subsequently be shown, is one of its most noticeable features. In towns children usually proceed to the primary school at the age of six, and at the age of five in the rural districts.

Primary Schools (*Lagere Scholen*).—To understand the present situation it will be necessary to give a few statistics. For the year 1897, Dr Fabius, one of the three District Inspectors* with whom I had a long interview at Delft, courteously supplied me with the following particulars which he had prepared for the Paris Exhibition. In each case I have omitted fractions of a florin :—

State-aid	-	-	3,844,960 florins	(£320,413 6s. 8d.)
Municipal-aid	-	-	9,087,648 florins	(£757,304 0s. 0d.)
School-fees	-	-	1,688,079 florins	(£140,673 5s. 0d.)
			14,620,687 florins	(£1,218,390 11s. 8d.) †

The number of scholars in attendance was 495,054, and the cost per head was therefore nearly 30 florins, or £2 15s.

In addition to the above aid, the State contributed 1,007,440 florins towards the maintenance of private schools. Their scholars numbered 224,361, so the grant per head was about 4½ florins, or 7s. 6d. The rest of their expenses was defrayed by school fees, and special funds.

The expenses incurred through the preparation and examination of teachers, the inspection of all primary schools, and the pensions of the teachers of public schools amounted to 1,507,191 florins, which brings the total outlay by the State and the municipal authorities to 15,507,247 florins.

After calculating the probable cost of maintaining the private schools, Dr. Fabius finally estimated the annual expenditure upon primary education by the country altogether at 21,083,450 florins. The population in 1897 was 5,004,204, and therefore the charge per inhabitant may be said to have been 4½ florins, or rather less than 7s. 3d.

* There are three Chief Inspectors and about 150 ordinary Inspectors (*Schoolopziemers*) for primary schools. The country is divided into three inspections, and Dr. Fabius is "Chief Inspector (*Inspecteur*) in the second Inspection."

† The Dutch florin of 100 cents is of the value of 1s. 8d., 12 florins, therefore, equal a pound sterling.

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A comparison of the official statistics taken from the Government Reports for 1890 and 1900 will indicate the progress made during recent years:—

	1890.	1900.
No. of public Schools	2,946	3,098
No. of private Schools	1,944	1,448
No. of scholars at public Schools	451,083	508,731
No. of scholars at private Schools	184,576	238,967
Free Scholars	301,153	298,100
Infant Schools	972	1,047
No. of Scholars	77,793	89,717

The following table gives the ages of children at primary schools:—

Year.	Below 6.	From 6-9.	From 9-12.	Above 12.
1889	16,400	256,210	272,352	90,697
1899	17,435	297,808	305,698	102,747

There has been a sensible reduction in the percentage of children who do not attend school at all, within the past ten years.

Year.	Estimated population.	No. of children of school age, i.e. from 6 to 12.	No. not upon the register of any School.	Percentage.
Jan. 1, 1890	4,505,932	601,056	71,321	nearly 12 p.c.
Jan. 1, 1900	5,103,924	671,711	57,518	about 8½ p.c.

In general, the schools—especially the urban schools—are fully as much entitled to praise, as they were when Cuvier visited them nearly a century ago, and Cousin in 1836. One remark in the latter's Report, quoted by M. Buisson, illustrates the advanced views held in the Netherlands at that early period upon the co-education of boys and girls.

“Une chose,” he wrote, “a choqué nos habitudes dans les écoles hollandaises: c'est que l'on y reçoit les filles aussi bien que les garçons. L'on nous a réitéré partout l'assertion que l'on n'avait jamais remarqué d'inconvenient: et comme cet usage s'observe non seulement dans les écoles de pauvres, mais aussi dans toutes les écoles bourgeoises, où les parents paient des rétributions assez fortes, et seraient maîtres de disposer autrement de leurs enfants, nous avons été obligés d'ajouter foi à ce témoignage.”*

* Dictionnaire de Pédagogie, pt. I. tom ii., p. 2231.

It would be interesting to know whether the early association with the Netherlands accounts for the prevalence of the custom in the United States. Irregularity of attendance, notably in the rural districts, has hitherto been the obstacle to the complete efficiency of the schools. The Inspectors constantly complain of this in their Reports, and could see no remedy except through a law of compulsory attendance. Eventually, such a law was passed in 1900, but was carried by a majority of one vote only. Fees were still retained. The Law of 1889 had made the payment of school fees, to the amount of at least 20 cents per month, obligatory except for poor children, whose fees may be remitted, and it is worthy of note that so democratic a nation should not consider free education the necessary corollary to compulsion. They not unreasonably believe that people attach more value to that which costs them something. Both the Laws of 1889 and 1900 are set out in full in Mr. Balfour's paper, referred to above. It may however, be convenient to repeat here the article of the latter Law, which defines the duration of school-life:—

Art. 3 :—"The obligation to provide that the child shall be placed at a primary school begins as soon as it has reached the age of seven. This obligation ceases as soon as the child has been six years a pupil of a primary school, and has gone through all the classes, or, when the instruction is given in classes which take up a longer time than six years, so many classes as include a period of six years, provided that in the last case the obligation does not cease until the child has reached the age of twelve and has passed through the class in which it was placed on reaching that age. A child, which on its admission to the school, is at once placed in a higher class, shall be considered to have passed through the period of instruction which the lower class or classes take up. The obligation ceases in any case if the child has passed through the class in which it was placed on reaching the age of thirteen."

To meet the demand for child-labour in the rural districts, at certain seasons, Article 13 of the Act wisely provides that the local Inspector "may grant a temporary exemption from attendance at school in behalf of work in or for the occupation of agriculture, gardening, tending cattle, etc., to children who, in the last six months preceding the application, have regularly attended school, for not more than six weeks annually, not reckoning the vacations." A child is considered to have attended regularly who for two consecutive months has not been absent on more than two occasions without reasonable excuse. The above provision serves a double purpose. It removes the objection of farmers and parents to the loss of a child's services, when work upon the land is most pressing, and it acts as a direct incentive to regular attendance. There are no half-time schools, and this temporary exemption granted to children for definite employment is in every way preferable to closing a school without any guarantee that the children will be engaged in any useful occupation. A child must be at least ten years old before it can obtain leave of absence, and there must be substantial reasons for every application. It is immaterial at what period of the year the leave is granted. For instance, last April, at Hemrik,

five children were allowed to be absent for six weeks for agricultural purposes. That the conditions, upon which the exemption is given, will be strictly adhered to is apparent from the number of children, whose applications have been refused. It is too early yet to say how far the provisions of the Act in regard to compulsory attendance will be enforced, but the Inspectors do not anticipate any difficulty. Personally, I found the attendance remarkably good. In many schools it is rare to find any child absent. In others, the average attendance is 95 per cent. At one of the Hague public schools, on examining the register, it appeared that of 495 scholars only 22 were absent, and of these 5 were ill and one was a Roman Catholic, who had to attend some religious ceremony. Thus the number of those unaccounted for did not exceed sixteen.

f. App. A.
for specimen
time-tables.

The Law of 1889 prescribes the following as obligatory subjects for all primary schools:—

- a. Reading.
- b. Writing.
- c. Arithmetic.
- d. Elements of the Dutch language.
- e. Elements of the History of Holland.
- f. Elements of Geography.
- g. Nature-study (*Kenisder Natuur*).
- h. Singing.
- i. First exercises in Drawing.
- j. Gymnastic exercises or Drill.
- k. Needlework for girls.

The optional subjects are:—

- l. Elementary French.
- m. Elementary German.
- n. Elementary English.
- o. Elementary General History.
- p. Elementary Science.
- q. Drawing.
- r. Elementary Agriculture.
- s. Gymnastics.
- t. Fancy Needlework for girls.

The extent to which the optional subjects are taught will be gathered from the following figures:—

Subjects.	l	m	n	o	p	q	r	s	t
No. of Schools	1,049	592	451	479	431	544	17	479	300

It will be observed that manual instruction is not recognised at all, and it is a little curious to note the opposition with which every effort to make the curriculum less exclusively literary has

Verslag van
den Staat
der Hooge-
Middelbare
en Lagere
Scholen,
1900, p. 225.

been met. The introduction of needlework for girls in 1889 was the first recognition of practical instruction in any form. So long ago as 1806, the Legislature expressed a wish that practical subjects might be taught, but, in the words of Dr. Fabius, "What is the use of a Law which suggests but does not compel?" Natural science was obligatory in 1857, but it is only within the last few years that it has been practically taught as "Nature-study." Although gymnastic exercises are presumably to be performed at every school, the unexplained opposition to them has been so great that the Law on this point has often remained a dead letter. There is, however, a growing conviction that the primary school must be brought into closer correspondence with the actual needs of the people, and that hand and eye training are essential elements in all true education. Dr. Fabius is wholly in favour of giving a more practical bias to the curriculum. He attributes the difficulty of effecting any reform to 4 causes:—(1) disinclination to move out of the old grooves, (2) the question of expense, (3) complaint on the part of the teachers that their time-tables are already full, and (4) occasionally their natural objection to undertake new subjects, for which they are not as yet qualified. These are difficulties with which we are familiar, and in regard to the attitude of some isolated teachers, the singularly apt remarks of Mr. Legard, H.M.I., might perhaps with advantage be quoted in Holland—

"Adaptation to new circumstances is necessary in all professions. A surgeon must familiarize himself with all new inventions, if he is to retain his practice. A civil engineer must avail himself of all the help that new discoveries in electrical science afford, if he wishes to make a livelihood in these days of keen competition. Even a clerk in a counting-house, or lawyer's office, must not rely solely upon his skill in handwriting, but must learn to use a typewriting machine with accuracy and precision, if he is to earn a living wage for himself. So it is in the teaching profession. If there is a demand for a certain kind of teaching, that demand must be met."

General
Report for
the Welsh
Division,
1901, p. 7.

It is expected that manual instruction will shortly be recognized, and that the Government may ultimately defray the cost of the apparatus, which would at present fall upon the municipalities.

Of the methods of instruction Cuvier wrote that they were "*au-dessus de tout élogé*." One can but repeat his statement. No one could fail to be struck with the "mind" and intelligence, which the teachers infuse into every lesson. They are not content to serve up a few barren and lifeless truths. The individuality of each child is apparently studied. Invariably the so-called "Heuristic" method is followed. The child is made to find out, instead of merely being told, about things. All the instruction proceeds from the known to the unknown. In Geography lessons commence with the school, then the street in which the school is situated, next the town, the province, the whole country and so on to Europe and elsewhere, each stage being illustrated with maps drawn by the children themselves. The same plan, so far as is practicable, is adopted in history. I happened to visit one school on the day, on which some of

the children had been taken for their history lesson to the Binnenhof, or "Inner Court."

In company with Mr. ten Bruggencate,* I saw one of the best primary schools at the Hague. The fees there are 5d. a week, and the school is divided into 12 classes. The maximum number of pupils in each class is 55, but this number is hardly ever reached in urban schools. In the lowest class I heard an admirable reading lesson given by a lady to some 36 children of about 6 years of age. It should be mentioned that in large schools the teachers of the lower-classes are always mistresses. The children were sitting with their hands clasped on the forms in front of them, and with their eyes shut, whilst the teacher drew a tree. Then the children, opening their eyes in great excitement, gave the picture its name, *boom*, which the teacher wrote upon the blackboard. The "phonetic" method is carried out by the analysis and synthesis of word-sounds. This is rendered easy owing to the uniformity of the vowel sounds in Dutch. An arithmetic lesson was being given to another class from blocks, designed by Mr. Van Pelt, to illustrate fractions. Elsewhere, physiology was being taught by means of figures of the human body, which can be taken to pieces. No object-lessons are given without each child having a specimen of the particular object to handle for itself. The recitation of poetry, and the singing in other classes were excellent. The sixth class was having its "Nature-study" lesson. Each child had a marsh buttercup, gathered by itself. The life history of the plant, its place of growth, the functions of the stem and the leaf were explained; the flower was then dissected and its formation described. This instruction is given once a week in class, and once a week at the school garden. This consists of a small piece of ground, where the children cultivate little patches of oats, rye, cabbage, potatoes and flowers, to illustrate as great a variety of plant-life as possible. In the school-yard are a lime, an acacia, and a chestnut, under each of which in turn I heard a class have its usual lesson on the varying structure and properties of these trees. Country walks are frequently taken to collect plants and insects, etc. The whole of this instruction is given in the ordinary school hours. Each room was plentifully supplied with flowers, in some tadpoles and various insects were being reared. It need hardly be said that the aim of this "Nature-study" is wholly educational, to develop the powers of observation, and to awaken a spirit of inquiry. The school has an excellent collection of insects made by the teachers and scholars. There is also a well-equipped gymnasium.

I visited another most interesting public school in Tulling Straat, a poorer district, of which Mr. Jan Ligthart, one of the

* To Mr. ten Bruggencate, Inspector of Secondary Schools for the six Southern Provinces, formerly Inspector of Primary Schools, and to Dr. Löhnis, of the Agricultural Division of the Ministry of the Interior, I was under the greatest obligations. They spared no effort to assist me, devoting whole days to my service, and accompanying me wherever they thought their presence might facilitate my inquiries.

most successful and original teachers in Holland, is the head-master. There are 400 pupils, who pay 2d. a week each. The general tendency of the instruction is to connect Nature, Commerce, Industry and Social Life with all the lessons. This is effected in a variety of ways. Fowls, pigeons, and guinea-pigs, are kept in the school-yard for object lessons. Deciduous and evergreen trees are grown, that the study of leaves may be continuous throughout the year. Excursions into the country, of which accounts must afterwards be written, are frequent. The youngest children have a small plot of grass, answering to a meadow, to attend to behind the school: the elder ones have a little arable land to cultivate, where they grow a few industrial plants. Throughout the classes the children, so far as is practicable, make the objects, about which they are learning, in paper, clay, wood, metal, etc. All the work has a direct use, and self-help is taught at every stage. For instance, those in the third class make and sew their own note-books. Every lesson is upon things known to the children themselves, and the instruction is correlated with their own work. So impressed was I with Mr. Ligthart's methods, that I asked him to write me a short account of them. This he kindly did, and the following is a translation of his letter:—

“Principles. (1) General knowledge of facts and things—acquired directly by perception—is digested and firmly fixed by various reproductions (speaking, drawing, use of paper and scissors, clay modelling). (2) The knowledge is derived first from immediate surroundings; afterwards from an ever-widening circle. (3) The principal question in the consideration of each object is, of what material is it made and how has this been done (technology and industry). (4) The order of the treatment of the objects is such as to secure regular gradation in the technical knowledge, so that the simplest modes of treatment come first, the most complex last. (5) The technological lessons are given in connection with (a) botany, zoology, and mineralogy, conducing to the knowledge of raw material; (b) geography, treating of the industrial centres and the places where the plants, animals and minerals mentioned under (a) are found; (c) the history of culture, since the civilisation of a people moves apace with its knowledge and manufacture of the raw materials. (6) The language-lessons are given in connection with the object-lessons—the increase of knowledge grows with the language. (7) Applied arithmetic draws for its material, as much as possible, upon the sphere whence general knowledge has been derived.

Illustrations. First year of course. Observations of school-room floor, leading up to the tree that produced the wood, hence to tree-felling, the sawing-mill and carpentry. The children make a paper floor, window, door, window in casement, door in frame; tools used in felling, ladder, axe, saw; carpenter's tools, hammer and plane; also the sawing-mill. With this sort of work the children use an 8 C. M. (3 inch) paper measure (measurement found by themselves), lead pencil, rule and

scissors. In the play-ground there are pigeons, which also make their houses (nests) of wood (twigs); man and beast alike get their necessaries from Nature; the manner of manufacturing this raw material marks the standard (stage) of culture. For the purpose of feeding the pigeons there is a shop near the classroom, at which the children buy food for the pigeons, thus acquiring knowledge not only of this food, but also of the most usual (solid) cubic measures, and getting practice in money-calculation. In the midsummer term they follow the development of the buds and the growth of the leaves of the principal trees and shrubs; various leaves are imitated in paper. The pigeons, too, are closely watched; building of nest, laying of eggs, sitting, feeding their young, the growth of a coat of feathers. All the educational material is continually repeated and completely absorbed by means of songs (set to music), short stories, games, etc. During the ensuing years of the course the following subjects are treated in turn: clay-modelling, metal-work, preparation of stone; manufacture of linen, cotton, paper, glass, lime (mortar); horticulture." From the above, it will be seen that the teachers have considerable latitude in devising their own methods of instruction.

These schools are selected, because they present features of peculiar interest, and not because "Nature-Study" happens to occupy a prominent place in their curricula. It and Natural Science are obligatory subjects alike for urban and rural schools. When driving, for instance, from Steenwyk to Frederiksoord to see the famous colony of the *Société de Bienfaisance* (*Maatschap-pij van Weldadigheid*) I chanced to pass a small school in the little hamlet of Eesveen. It was after school-hours, but I stopped to look at the buildings. On entering the school, I found the head-teacher busily engaged in giving an extra lesson on plant-life to a boy and a girl, each of whom had a handful of flowers. The teacher was enthusiastic on the subject of "Nature-study," since in his opinion it supplied the most effective means for developing the *intelligence* of his pupils. He also told me of the good results which had already followed from the Compulsory Attendance Law. Formerly, the average attendance was 89 per cent., now it is 97 per cent. On the occasion of my visit, May 20th, out of 81 children on the books only five had been absent, one of whom was ill, and the other four had permission from the Inspector to work in the fields.

The fact, however, that "Nature-study" receives so much attention in the urban schools, where it is on the whole more efficiently taught than in the villages, is a very important point. It testifies to the great educational value of the subject, quite apart from its relation to any rural pursuits. Generally, no text-books are used, and in good schools simple experiments are performed. This is rarely the case in the rural schools where the teachers often are not sufficiently qualified, or where the municipality is too parsimonious to provide the necessary apparatus. Nor are country walks (*promenades scolaires*) frequent in the villages; there appears to be some fear of

exciting the ridicule of farmers and labourers. School-gardens, in the English sense of the term, are practically non-existent. Cottage-gardening, therefore, as understood here is not taught. In every way the Dutch methods in "Nature-study" appear to be worthy of imitation. There can be no question but that such instruction should begin with object-lessons *in* the school, and be followed by similar lessons out-of-doors. In some parts of England there is a tendency to teach cottage-gardening without any connection whatever with the rest of the curriculum. This is altogether a mistake. The subject has, of course, its own value as a form of physical exercise, and as a means of imparting some dexterity of hand and eye, but the mere cultivation of a few vegetables and flowers is not an end in itself. It is admittedly more difficult to give a good object-lesson on a dandelion or a thistle than it is to teach a child how to plant a potato, and teachers occasionally prefer to restrict themselves to the easier task. If the practical work, however, is to attain its true purpose, it should be made to supplement and illustrate the class-lessons.

At the same time, it would be unfair to imply that the Dutch rural schools are invariably superior to our own. It is always a mistake to generalize from limited experience. In the Netherlands, as elsewhere, the quality of each school depends mainly upon the character, capacity, and sympathy of the teacher, and the public spirit of the school authorities. We have some rural schools probably unsurpassed in any country, but what is universal in the Netherlands—the endeavour to awaken the *mind* and *intelligence* of every child by certain definite methods—is in England comparatively exceptional. It has been due to the necessity hitherto of regarding each child purely as a grant-earning machine without any reference to its individual development. The removal of this necessity should enable all our rural schools gradually to attain that level of excellence as yet reached only by a few. Still, it must not be forgotten that improvement can never become uniform and general, until all managers are free to think more of educational interests, and less of matters of finance.

The question whether the curriculum of the primary school has any bearing upon rural depopulation does not seem to have been raised in the Netherlands. There is considerable migration, due, as in other countries, mainly to social and economic causes. The elaborate system of tramways, practically covering the whole country, may do more than anything else to check the tendency to desert the villages, by bringing the advantages of the towns within easy reach of all. It must be remembered, too, that the Dutch primary schools have never, as was formerly the case in England, catered exclusively for urban requirements. Their aim has always been to give a child, so far as may be possible in its short primary school-life, such a general education as not to unfit it, or to create in it a distaste for either rural or urban occupations. The need, therefore, of so modifying the curriculum as not to withhold from it all knowledge of the life

around it has not been experienced. Nor has it ever been imagined that technical instruction in agriculture or horticulture can be given at a primary school. It will have been observed that the so-called "Principles of Agriculture"—a subject of little or no practical value—are only taught at 17 rural schools, at each of which there is an extended course.

By article 44 of the Law of 1889 each commune must bear the cost of (a) building, maintaining, and purchasing land for, the school-house and teacher's house; (b) purchasing and maintaining school furniture, books, and other school material; (c) lighting, cleaning and warming the premises; and (d) libraries, prizes and diplomas. The State contributes aid at the rate of 25 per cent. of the total expenditure, provided that all plans and accounts are submitted to the Ministry of the Interior. As a rule, the buildings are good, and the class-rooms light and well-ventilated. Beyond the usual pictures and diagrams on the walls, many of the schools are provided with weights and measures, globes, apparatus for simple experiments, models and geometrical figures for drawing, collections of vegetables and stuffed animals, dried and living plants and flowers, and enlarged specimens of needlework, etc., for girls. In addition, the majority of them are furnished with libraries, and some have museums. The chief defect is an occasional lack of cleanliness, and there is a complaint that the schools are not always sufficiently warmed in winter. The teachers' houses, which are subject to Government inspection, and generally have gardens, satisfy all requirements.

The school-staff is fixed upon the following scale:—

Below 41 pupils	-	-	-	-	-	-	-	1 teacher.
From 41 to 90 pupils	-	-	-	-	-	-	-	2 teachers.
" 91 " 144	"	-	-	-	-	-	-	3 "
" 145 " 199	"	-	-	-	-	-	-	4 "
" 200 " 254	"	-	-	-	-	-	-	5 "
" 255 " 309	"	-	-	-	-	-	-	6 "
" 310 " 364	"	-	-	-	-	-	-	7 "
" 365 " 419	"	-	-	-	-	-	-	8 "
" 420 " 474	"	-	-	-	-	-	-	9 "
" 475 " 529	"	-	-	-	-	-	-	10 "
" 530 " 584	"	-	-	-	-	-	-	11 "
" 585 " 600	"	-	-	-	-	-	-	12 "

There are two certificates or diplomas, one qualifying for the position of assistant teacher; and the other, for which candidates must be at least twenty-three years of age, for that of a head-mastership. The teachers are, however, really divided into three categories, those actually at the head of a school, those possessing the higher certificate but acting as assistants in large schools, where a proportion of the staff must be so qualified, and ordinary assistant teachers. The exact status and salary of the second class has never been properly determined. In 1899, the total number of teachers, including those in the private schools was 19,554, made up as follows:—3,996 head-masters, 9,329 assistant masters, 530 headmistresses and 5,699 assistant mistresses. No mixed public school may be under a mistress, and there were only 63 headmistresses of public girls'

schools. For private schools there is no legal limit as to the number of scholars. Up to 1884 the limit for public schools was 400. It was then, perhaps unfortunately, raised to 600, which certainly lessened the chance of a teacher's obtaining a headmastership. The communal council fixes the amount of each teacher's salary, towards which the State makes contributions in proportion to the number of scholars in attendance, and the number of optional subjects taught. There is, however, a minimum salary determined by law. Headmasters must have at least 700 florins a year, together with a house, or lodging allowance; teachers with the higher certificates but acting as assistants, 600 florins a year; and for ordinary assistant teachers the minimum has this year been raised from 400 to 500 florins. Married assistant teachers over twenty-eight years of age have an additional salary of at least 50 florins instead of a house. The position of the assistant teachers is not quite satisfactory. In 1897 Dr. Fabius estimated that 57·6 per cent. of the salaries did not amount to 700 florins a year. The recent augmentation of the minimum will have improved matters somewhat, but the rural communes are often not disposed to pay more than they can possibly help. Government pensions not exceeding two-thirds of the salary received during the preceding twelve months, and of the estimated rental value of the teacher's house or of the lodging allowance, are paid to public school teachers of sixty-five years of age, and to those incapacitated by illness after ten years' service.* Towards the pension fund teachers contribute 2 per cent. of their total income. From this source the State received 217,882 florins in 1898, in which year pensions ranging from 200 to 1,800 florins were granted to 65 headmasters, and from 100 to 800 florins to 57 assistant teachers.

Law of 1889,
clause 45.

There are three unions or associations of teachers. The principal one is—The Dutch Teachers' Society—of which most teachers are members; next—The Association of Class Teachers—of assistant masters only; and last—The Union of Headmasters, which is too exclusive to have much influence. The first has few grievances, and devotes itself mainly to educational objects. The second is a more active body, and its organization is not unlike that of the National Union of Teachers. Improvement in salaries, extension of the pension system, and less dependence upon the headmasters, are amongst the questions with which it concerns itself. In each of these respects there is room for reform. The Association had its own representative in the last Parliament, and the influence, which it exercises upon political parties, is considerable. Education is not unpopular in the rural districts, but the relations of the teachers with the farmers and others are not invariably so friendly as they are in France. Doubtless, this is to be attributed to the fact that a portion of the salaries is raised

* The pension depends on the length of service, being calculated for each year at the rate of one-sixtieth of the salary paid. Thus for 40 years' service, it amounts to forty-sixtieths or two-thirds, which is the maximum pension.

by local rates. Where, as in France, this is not the case teachers have not found it necessary to combine for the protection or advancement of their interests.

The pupil-teacher system has been so fully described by Mr. Balfour, that it would be superfluous to discuss it here. It is important, however, to notice that the regulation forbidding pupil teachers (*kweekelingen*) to give any instruction, except under the supervision of a member of the school staff, is *strictly* enforced. The number of pupil teachers in 1898 was 1,934, 72 less than in the previous year.

Evening Schools (*Avondscholen*).—Of late years the number of these schools, which are really a department of the day school, and exist chiefly where other educational opportunities are wanting, has steadily diminished. They were provided by 146 communes in 1889, and in 1899 by 98. The scholars, as a rule, are those in attendance at the day school. In the former year out of 26,316 scholars, only 4,759 went exclusively to the evening school, in the latter year 3,012 out of 25,228.

Continuation Schools (*Herhalingscholen*).—By Article 34 of the Act of 1900 every commune must organize a continuation school for those who wish to profit by it, and have gone through the whole primary course. The school must be open for at least 96 hours in the year, and the curriculum must include at least four subjects, of which two at least must be selected from those comprised in the usual primary school course. Opportunities must also be afforded for girls, whether they take part in the lessons with boys or not, to receive continuation school instruction for 96 hours in the year apart from the hours in the evening. The girls' classes can only be held on two half-days in the week, and must commence before 5 p.m., unless special permission to hold them in the evening has been given. This compulsory provision of facilities for instruction beyond the day school is a great advance upon our *laissez faire* policy, which allows whole districts to be absolutely destitute of any education or training for lads and girls at the most impressionable period of their lives, and when their characters are being formed for good or evil. When the Act was under discussion, an attempt was made to secure obligatory attendance up to the age of fourteen, but this was defeated. The schools are generally open for six months in the winter, and the age of the pupils is from twelve to sixteen years. In 1899, the number in attendance was 18,374. The instruction is usually given by the teacher of the day school, who is paid at the rate of about one shilling an hour, half of which comes from the State and half from the municipality, but an outside teacher, if qualified, may be engaged. The fees vary according to local circumstances. The curriculum, which need not be, as the name "*herhaling*" would imply, simply a repetition of the day school work, is determined by the communal authority, the head teacher and the district inspector. It may include instruction in French, German, English, history, elementary science, drawing, the principles of agriculture or horticulture, gymnas-

ties, and fancy work for girls. There is no practical instruction except that cookery has just been introduced into a few girls' schools, and it is questionable how far the schools are likely to meet the real needs of the artisans and labourers. In towns, too, there is some danger of their clashing with the *Burger Avondscholen*. As yet there is no general agreement upon what the exact function of the continuation schools should be, and the question is attracting a large measure of public attention. It is not an easy problem to solve. In the rural districts, especially, it certainly appears that some of the continuation classes might be open to adults, in the absence of any obligatory attendance up to a given age. At Utrecht, at the continuation school, of which Mr. K. Beversluis* is headmaster, and where there are now 100 pupils, the full course of instruction lasts three years, commencing on April 1st. Pupils completing the full course receive a certificate and prize from the municipality. There are three classes, with an extra class from October 1st to March 31st for backward pupils. The following is the time-table:—

Monday	-	-	-	7 to 8 p.m.	Reading	See App. I for the tim- tables of other con- tinuation schools.
"	-	-	-	8 to 9 p.m.	The Dutch Language	
Tuesday	-	-	-	7 to 9 p.m.	Drawing (perspective)	
Thursday	-	-	-	7 to 8.30 p.m.	Arithmetic and Geometry	
"	-	-	-	8.30 to 9 p.m.	Writing	
Friday	-	-	-	7 to 9 p.m.	Drawing (ornamental)	

The reading lessons are upon the laws of health, and the life and duties of a citizen. The instruction in the mother-tongue is less directed to the intricacies of grammar and rules of orthography than to the correct and fluent composition of an ordinary business letter. In arithmetic the subject matter deals exclusively with practical affairs. In writing, the pupils learn to keep accounts and to conduct commercial correspondence. As will be seen, great importance is attached to drawing.

The Training of Teachers.

(Opleiding van Onderwijzers.)

Teachers are trained at the State Normal Colleges (*Rijks-kweekscholen*), municipal and private Normal Colleges, or through State or private courses of instruction (*normaallessen*) and occasionally by private tuition. The State subsidises each

* Mr. Beversluis has just published a singularly interesting pamphlet upon the future of these schools, entitled "*Het Herhalings-onderwijs.*" (J. G. Van Terveen en zoon, Utrecht, 1901.)

method of training, and the following was the State expenditure for 1897 :—

	Florins.
State Normal Colleges - - - - -	403,092
Municipal Normal Colleges - - - - -	40,167
Private Normal Colleges - - - - -	97,576
State Courses of Instruction - - - - -	495,150
Private Courses of Instruction and Private Tuition - - -	134,450
	1,170,444

The municipal expenditure for that year amounted to 180,797 florins (£15,066 8s. 4d.).

The students in 1897 were distributed as follows :—

	Males.	Females.
State Training Colleges - - - - -	497	60
Municipal Training Colleges - - - - -	251	501
Private Training Colleges - - - - -	176	473
State Normal Courses - - - - -	2,265	2,236
Private Normal Courses - - - - -	1,375	1,857
Private Tuition - - - - -	153	99
	4,717	5,226

In that year certificates were granted to 625 masters and 664 mistresses. It will be remembered that the law directs that the lower classes in primary schools should be under a mistress. This accounts for the large number of female students, but many of them subsequently follow other occupations. There are six State training colleges for male students, viz., Nijmegen, Haarlem, Middelburg, Deventer, Groningen and Maastricht, and one for female students at Apeldoorn. At Amsterdam, Leiden and Groningen the municipalities have their own colleges under the Act of 1878; the two former are open to both male and female students, the last named is for female students only. There are 19 private training colleges, of which 12 are the property of different religious denominations. The course of training is for four years. Students are admitted to the State training colleges at the age of 14 or 15, but must not be above 18. Twenty vacancies are annually advertised at each college before the first of February, and the number of candidates has latterly been from 60 to 120 at every centre. An examination, conducted by the Director and Staff of the college, is held in the subjects taught at primary schools, and the successful candidates are afterwards medically examined. At State train-

ing colleges for males none of the students live upon the premises. This fact appears to have astonished M. Cousin considerably on his visit to Haarlem, and he instituted minute inquiries about the possible effects of such a custom. In reply Mr. Prinsen, the Director, made the following interesting remark :

“ Nous sommes convaincus qu'un jeune homme qui a passé quelques années dans la vie commune d'une école normale d'internes, se trouve extrêmement embarrassé quand il sort de là pour se conduire tout seul, tandis que, dans notre système, le jeune homme apprend à se conduire lui-même, à traiter avec les autres : et la vie qu'il mène est l'apprentissage de la vie qu'il mènera plus tard.”—(“Buisson's Dictionnaire de Pédagogie,” pt. I., tom. II., p. 2232.)

Suitable lodgings are found by the Directors of the colleges. The State supplies the students with books, etc., and pays for the board and lodging of those whose relations do not live in the town, to the amount of about 300 florins a year. The Director exercises a general supervision over them, and furnishes an annual report to the Minister of the Interior upon their conduct.

The college-year begins on the first Monday in May. The scheme of studies is drawn up by the Director and Staff. It differs slightly at different colleges, mainly in the time devoted to particular subjects. “Nature-study” is taught everywhere; agriculture and horticulture only at Nijmegen, Haarlem, and Middelburg. At the second of these there is also manual instruction. English is not taught except at Apeldoorn for two hours a week to students of the second and third years.

Appended is the time-table at Haarlem for 1900-1901 :—

TABLE OF LESSONS AT THE STATE TRAINING COLLEGE, HAARLEM, 1900-1901.

	Hours.	First Year.	Second Year.	Third Year.	Fourth Year.
MONDAY.	8—8.45	Grammar	Grammar	Arithmetic	Hygiene
	8.45—9.30	Gymnastics	Geography	Grammar	Grammar
	10.15—11	Geography	Geometry	Geometry	Literature
	11—11.45	Geometry	Gymnastics	History	Geometry
	11.45—12.30	Violin (a)			
	1—1.45		Violin (a)		French (d)
	1.45—2.30	French (a)	Arithmetic	Arithmetic	History
	2.30—3.15	Arithmetic	History	Literature	Arithmetic
	3.15—4	History	Algebra	Gymnastics	Horticulture
	4.15—5	Singing (Theory)	Violin (b)		Gymnastics
TUESDAY.	8—8.45	Algebra	Style	Reading	Natural History
	8.45—9.30	Gymnastics	Reading	Natural History	Cosmography
	10.15—11	Reading	Natural History	Drawing	Reading
	11—11.45	Natural History	Gymnastics	Drawing	Style
	1—1.45	Carton-work	Drawing	Geography	History
	1.45—2.30	Clay-work	Drawing	History	Geography
	2.30—3.15			Violin (a)	Carton-work
	3.15—4			Violin (b)	Clay-work
	4.15—5				Gymnastics

TABLE OF LESSONS AT THE STATE TRAINING COLLEGE, HAARLEM, 1900-1901.

	Hours.	First Year.	Second Year.	Third Year.	Fourth Year.
WEDNESDAY.	8-8.45	German	Physiology	Physics & Chemistry	Pedagogy
	8.45-9.30	Writing	German	Pedagogy	Physics & Chemistry
	10.15-11	Pedagogy	Physics & Chemistry	Drawing	German
	11-11.45	Physics & Chemistry	Pedagogy	German	Drawing
	11.45-12.30	Violin (<i>b</i>)			
	1-1.45			French (<i>c</i>)	
	1.45-2.30		French (<i>b</i>)	Wood-work	Drawing
	2.30-3.15	Horticulture	Geography	Wood-work	Drawing
	3.15-4	Drawing	Gymnastics	Horticulture	Wood-work
	4-4.45	Drawing			Wood-work
THURSDAY.	8-8.45	Grammar	Grammar	Anatomy	Arithmetic
	8.45-9.30	Gymnastics	Geography	Grammar	Grammar
	10.15-11	Geography	Geometry	Algebra	Literature
	11-11.45	Geometry	Gymnastics	History	Algebra
	11.45-12.30	Violin (<i>a</i>)			
	1-1.45		Violin (<i>a</i>)		French (<i>d</i>)
	1.45-2.30	French (<i>a</i>)	Arithmetic	Arithmetic	History
	2.30-3.15	Arithmetic	History	Literature	Arithmetic
	3.15-4	History	Horticulture	Gymnastics	Writing
	4.15-5		Violin (<i>b</i>)		Gymnastics
FRIDAY.	8-8.45	Algebra	History	Reading	Pedagogy
	8.45-9.30	History	Reading	Style	National Institutions
	10.15-11	Reading	Industry and Art	Industry and Art	Reading
	11-11.45	Style			Style
	11.45-12.30			Violin (<i>a</i>)	
	1-1.45		French (<i>b</i>)	Violin (<i>b</i>)	
	1.45-2.30	Industry and Art	Carton-work	Geography	Mental Arithmetic
	2.30-3.15	Geography	Clay-work	Writing	Geography
	3.15-4	French (<i>a</i>)	Algebra	Carton-work	History
	4.15-5		Writing	Clay-work	Gymnastics
SATURDAY.	8-8.45	German	Singing	Physics & Chemistry	Pedagogy
	8.45-9.30	Singing	German	Pedagogy	Physics & Chemistry
	10.15-11	Pedagogy	Physics & Chemistry	Singing	German
	11-11.45	Physics & Chemistry	Pedagogy	German	Singing
	11.45-12.30	Violin (<i>b</i>)			
	1-1.45			French (<i>c</i>)	
	1.45-2.30	Wood-work		Cosmography	Violin
	2.30-3.15	Wood-work		Gymnastics	French (<i>c</i>)
	3.15-4		Wood-work	Gymnastics	French (<i>c</i>)
	4-4.45	Gymnastics	Wood-work		

Each class should consist, as nearly as possible, of twenty pupils. Since French is not a subject for the entrance examination, and the knowledge of that language, possessed by the students, varies considerably, five distinct classes are formed for it, as indicated above. For the violin lessons, which all students receive, each class is divided into two parts; this subject is taught quite as much for its value in developing the ear and imparting accuracy of tune, as for its use afterwards for instruction in music and singing. In the fourth year for the majority of subjects half the class has a lesson, whilst the other half is engaged in teaching at the primary school annexed to the college. Twenty-four hours a week are devoted to the practising school. The whole curriculum is admirably adapted to qualify students to give effective hand and eye training to their future scholars, and in this respect Haarlem occupies a prominent position. In wood-work the students make a complete set of the models of the Swedish slöjd system. They also make objects required for other lessons, such as chisels, rules, levers and scales; models of tools or engines to assist in explaining different trades and industries; implements for the manufacture of linen, and lace; and churns. In addition, each student constructs an aquarium, a terrarium, and a case for insects to be collected and attended to by himself. All the models are first drawn by the students, either full size or to scale. The aim of the manual instruction is (1) to provide an efficacious means for satisfying the need for physical exercise, (2) to train the eye and the hand, and to form habits of accuracy, (3) to lay, by methods of intuition, the foundations of the mathematical sciences, and their applications, (4) to teach the students how to make the apparatus necessary for object lessons in the primary school, and (5) to qualify them to give manual instruction themselves. As yet the State gives no certificate for this subject, but most of the students at Haarlem pass the examination and obtain the certificate of a private Slöjd Association. Special diplomas (an elementary and an advanced one) are offered by the State for proficiency in agriculture and horticulture. This was originally due to the action of the "*Maatschappij tot Nut van't Algemeen*," a powerful society, which has laboured nobly for the education of the people. Students prepare for these diplomas either by following the courses prescribed by the National Agricultural College at Wageningen, or by private study. The instruction in botany or "Nature-study" at Haarlem is as follows:—

First year:—Observation and description of certain plants, easily recognised. The different forms of leaves, stems, roots, and the structure of flowers. The morphology of plants. Each student has his own collection of mounted specimens.

Second year:—Continued study of plant-life. Inflorescence, position of leaves and fruit. The principles of classification. Characteristics of the principal families. Nutrition of plants: formation of starchy matter from carbonic acid and water: conversion of starchy matter into glucose: formation of reserve

nutritive material: absorption of water: evaporation of water at the surface of the leaves.

Third year:—Arrangement of plants. Object and character of classification. Fertilization, reproduction, respiration, nutrition, and something of the anatomy of plants.

Fourth year:—General recapitulation: morphology, physiology and classification.

In zoology the following is the course:—

First year:—Mammals. The observation, description and comparison of certain mammals. Comparative study of the skeleton, external form, nourishment, and habits.

Second year:—The rest of the vertebrates. The study is always comparative. Respiration, the circulation of the blood, digestion, animal heat.

Third year:—Insects: after comparing them, their general characteristics and those of the different orders are studied.

Fourth year:—Molluscs and the lower orders. General recapitulation of zoology.

Horticulture is taught theoretically and practically. The theoretical instruction, which is given mainly in the winter, is illustrated by experiments and the analysis of soils. For the practical work there are two pieces of ground, one about 10 mètres by 20, and the other 15 mètres by 30, divided into rectangular plots. These are cultivated entirely by the students; the teacher is the Professor, who gives the lessons in class. A year or so ago a practical gardener was engaged, but failed as a teacher. The scheme of instruction in the garden is as follows:—

First year:—Study of certain growing plants, such as cress, radishes, beans, peas, celery, potatoes, flax, and tobacco. Digest of the theory of agriculture.

Second year:—Study of cereals, maize, hemp, buckwheat, caraway, sunflowers, chicory, spinach, onions, purslane. Fermentation and putrefaction: composition of the soil: manuring.

Third year:—Flowers; crocus, snowdrop, violets, etc. Chemical manures. Cultivation of tobacco. Nutritious preserves.

Fourth year:—General recapitulation.

The gardening is extremely popular, and there is no doubt that, viewed educationally, the system pursued leaves little to be desired. It may be inadequate from a purely agricultural standpoint, but it cannot be too often repeated that the primary school does not require an agricultural expert. Those students, moreover, who obtain the advanced Diploma in Agriculture, are amply qualified to act as pioneers of agricultural science in the rural districts. There has never been any suggestion that the training of rural should be differentiated from that of urban teachers, and, as we have seen, "Nature-study" is considered to be an essential part of the curriculum in every primary school. As a rule the students first go to a village school, and then move into the towns, where the salaries are higher.

To every training college a primary "practice" school (*Leerschool*), all the expenses of which are defrayed by the Government, is annexed. The one at Haarlem—a mixed school—has an

unusually large garden, cultivated by the children. Its time-table indicates the very comprehensive and *educational* character of the curriculum at these State primary schools.

FIRST YEAR.		SECOND YEAR.	
9—9.30	Reading	9—9.30	Object lessons
9.30—9.45	Writing	9.30—10	Reading
9.45—10	Gymnastics	10—10.15	Writing
10—10.30	Arithmetic	10.15—10.30	Gymnastics
10.30—11	Object lessons	10.30—11	{ Arithmetic, Measuring or Weighing
11—11.15	Games	11—11.15	Singing
11.15—11.30	Singing	11.15—11.30	Games
11.30—12	{ Clay Modelling, or Plaiting	11.30—12	{ Paper-folding, or Clay Modelling
2—2.30	{ Drawing, or Block- building	2—2.30	Drawing
2.30—3	{ Measuring, or Ob- ject lessons	3.30—3	{ Arithmetic, Measuring or Weighing
3—3.15	Games	3—3.15	Recitation
3.15—3.30	Recitation	3.15—3.30	Games
3.30—4	Reading	3.30—4	Reading

The time-table is the same for every day in the week. Wednesday and Saturday are half-holidays. On Wednesdays girls have sewing from 2 to 3 p.m.; in the opinion of some of the Inspectors this is hardly sufficient.

THIRD AND FOURTH YEARS.

Monday and Thursday.		Tuesday and Friday.		Wednesday & Saturday.	
9—9.30	{ Object lessons on Plants, Animals, &c.	9—9.30	{ Object lessons on Plants, Animals, &c.	9—9.30	{ Object lessons on Plants, Animals, &c.
9.30—10	{ The Dutch Language	9.30—10	{ The Dutch Language	9.30—10	{ The Dutch Language
10—10.15	Singing		{ Gymnastics (boys)	10—10.15	Singing
10.15—10.30	Games	10—10.30	{ Arithmetic (girls)	10.15—10.30	Games
10.30—11	{ Arithmetic, Weighing and Measuring	10.30—11	{ Gymnastics (girls)	10.30—11	{ Arithmetic Measuring, or Weighing
11—12	Carton work		{ Arithmetic (boys)	11—12	Reading
2—2.30	Nature-study	11—11.30	{ Clay Modelling	On Wednesdays the girls have their sewing lesson from 3 to 4 p.m.	
2.30—3	Writing	11.30—12	Singing		
3—3.30	History	2—2.30	Geography		
3.30—4	Reading	2.30—3	Writing		
		3—3.30	Drawing		
		3.30—4	Reading		

FIFTH AND SIXTH YEARS.

Monday and Thursday.		Tuesday and Friday.		Wednesday.	
9-10	Reading	9-10	Reading	9-10	Reading
10-11	{ Arithmetic, Measuring, or Weighing	10-10.45	{ Arithmetic, Measuring, or Weighing	10-10.30	{ Gymnastics (boys) Writing (girls)
11-11.30	{ Gymnastics, (boys) Writing (girls)	10.45-11	Games	10.30-11	{ Gymnastics (girls) Writing (boys)
11.30-12	{ Gymnastics (girls) Writing (boys)	11-12	History	11-12	{ Arithmetic, Measuring, or Weighing
2-2.45	{ The Dutch Language	2-2.45	Composition	Saturday.	
2.45-3.30	{ Object lessons on Plants, Animals, &c.	2.45-3.30	Geography		
		3.30-4.15	{ Freehand Drawing	9-10	Reading
3.30-5	{ Clay Modelling or Woodwork	4.15-5	Nature-Study	10-11	Cardboard work
				11-12	{ Arithmetic, Measuring, or Weighing

Whilst the boys have wood-work, the girls have needle-work.

The courses of instruction for students, not at any training college, are State Normal classes (*Rijksnormaallessen*), private courses (*bijzondere normallessen*), and those conducted simply through headmasters of schools (*hoofden van scholen*). The number of the latter is decreasing, during 1898 there were 112 of them with 220 pupils, of private courses there were 156 with 1,390 male and 1,206 female pupils. There were 99 State courses with 2,761 male and 2,701 female pupils. In each case, the syllabus and timetable must be approved by the Minister of the Interior. The State Normal classes are divided into two grades by a decree of April 14th, 1898: in the lower one the obligatory subjects of the primary school, together with needlework for females, must be taught; in the upper, in addition to these subjects, instruction in elementary science, and in either English, French, or German, must be provided, and, if possible, the laws of health, especially in relation to alcoholism and its prevention, should be studied. As a rule, the courses last four years, and pupils are admitted at the age of 15, if they have passed through a primary school.

Assistant-teachers qualifying to rank as head-teachers have advanced courses: these were attended by 573 males and 222 females in 1898, of whom 134 and 41 respectively obtained certificates that year. Candidates for this certificate must have taught for at least two years at some primary school, or have followed the course at some training college for two years since he or she became an assistant-teacher.

Candidates for a certificate as assistant-teacher must be above 18 years of age, and must pass an examination, particulars of which are given by Mr. Balfour.

Voluntary examinations are also held, and certificates awarded in each of the optional subjects of the primary schools, and the following table shows the results of all these examinations for 1898:—

Subject.	No. of Candidates.	Successful.
Assistant-Teachership - - -	2,495	1,574
Hevl-Teachership - - -	1,027	460
Modern Languages - - -	1,264	675
Advanced Mathematics - - -	94	62
Advanced Gymnastics - - -	27	16
Gymnastic Exercises - - -	1,624	1,170
Freehand Drawing - - -	331	106
Agriculture - - - - -	38	21
Horticulture - - - - -	11	4
Sewing - - - - -	1,478	1,017
Fancy Needlework - - -	160	102

The comparatively low percentages of passes indicate that the examinations must afford a very adequate test of a teacher's qualifications. For agriculture and horticulture there are free classes at various centres, conducted either by the State Professors of Agriculture and Horticulture, the Directors of the Agronomic Stations or Members of the Staff at the winter schools. In 1898, there were 15 centres for agricultural classes and 2 for horticultural, attended by 203 and 23 students respectively. The course of instruction is for twelve or six months. During recent years this branch of education has attracted an increasing measure of public attention.

SECONDARY OR INTERMEDIATE EDUCATION.

(Middelbaar Onderwijs.)

Burgher Schools (*Burger-Scholen*):—By Article 14 of the Law of 1863 every commune with a population of 10,000 must provide both a day and an evening Burgher School. They are intended for future artizans and labourers, but it was reasonably urged by several members of the Second Chamber of the States-General, when the Act was under discussion, that young people of the working-classes could rarely attend school in the day-time. Such proved to be the case. In 1874 only five day-schools remained, and there is now but one, at Leeuwarden, which will shortly disappear, a more practical school being founded there instead. The Act, however, has never been repealed, and the obligation to establish a day-school, if the population be as ~~stat~~ still holds good, unless other facilities for education ~~hav~~ introduced. Most communes, therefore, have to apply Government every five years, as a rule, to be ~~exempte~~ erecting new schools. To satisfy the requirements of ~~the~~ the communes of 10,000 inhabitants, and some of 7,000 have preferred to found Higher Burgher Schools. I

progress, therefore, has been very marked. Girls were first admitted as pupils in 1871. In towns where there is no Girl Higher Burgher School, they are admitted upon the same terms as boys. Where there is such a school, before they may join any State Boys' School, they must obtain special permission from the Ministry of the Interior, and be working for the higher branches of education. The usual age of admission is 12 or 13, and all pupils must undergo an entrance examination out of 2,359 candidates in 1898, 1,758 passed. At the end of the course diplomas are awarded; for these, 578 were examined in 1898, and 513 (including 8 girls), were successful. The diploma entitles the pupil to go to the Polytechnic at Delft or to one of the Universities to study medicine or natural science. To enable the pupil to attend theology, law or literary classes at the University a supplementary examination in Greek and Latin must be passed. The examination for a diploma is decidedly severe, and a simplified programme has recently been submitted to the Government. It is the same for all schools and the papers are set by the Inspectors, who make a selection from the subjects sent to them by the different examining Committees. For this year the following was the official notice as prescribed by a Decree † of March 10, 1870:—

FINAL EXAMINATION FOR HIGHER BURGER SCHOOLS.

1901.

REGULATIONS OF THE WRITTEN EXAMINATION.

Monday	—June 17—	a.m.	Algebra	3 hours
		p.m.	Dutch	3 "
Tuesday	—June 18—	a.m.	Geometry	3 "
		p.m.	French	3 "
Wednesday	—June 19—	a.m.	Nature-study	4 "
		p.m.	Book-keeping	2 "
Thursday	—June 20—	a.m.	Trigonometry	3 "
		p.m.	English	3 "
Friday	—June 21—	a.m.	Descriptive Geometry	3 "
		p.m.	German	3 "
Monday	—June 24—	a.m.	Chemistry	3 "
"	"	p.m.	Freehand Drawing (First Grade)	3 "
Wednesday	—June 26—	a.m.	Mechanics	3 "
"	"	p.m.	Freehand Drawing (Second Grade)	3 "
Thursday	—June 27—	a.m.	Geometrical Drawing	} optional
"	"	p.m.	" "	

This is followed by an oral examination in July, which includes some subjects not mentioned in the above list, at some convenient centre before a Committee appointed for the purpose.

* By a Royal Decree of January 23, 1902, the entrance examination is no longer obligatory. The Director of each State School may exempt candidates from it either partially or wholly, as he thinks proper.

† New regulations were issued by a Decree of June 27, 1901, but they do not appear to have materially lessened the severity of the examination though they have simplified it.

by the Provincial Authorities. (*Commissaris der Koningen*.) In some cases two or three provinces are combined: for instance, Utrecht and Overijssel appoint one Committee, as do also Friesland, Groningen and Drenthe. The examination is for three days, and for not more than three hours a day.

The curriculum must embrace the subjects mentioned in Articles 16 and 17 of the Act of 1863 for each type of school. Considerable latitude, however, is allowed in drawing up the time-tables, and more or less time is devoted to particular subjects, according to local circumstances. It was originally thought that the syllabus for the first three years might be identical for both schools. This was obviously impracticable. What should be in itself a complete course of instruction for schools of three years, could not be appropriate to a portion only of the programme in schools of five years. The idea was therefore abandoned. There is a general feeling that too much is attempted in the latter schools, and that the programme is overladen. For this feeling there is a good deal of justification. The framers of official programmes are in every country always apparently more anxious not to omit anything, which can possibly be taught, than to suggest what may be thoroughly assimilated within a given period. In some quarters it is urged that the instruction is too theoretical, and that science occupies too prominent a position. Upon this it is difficult to express an opinion. The character of the instruction must be determined by the aim of the school. As a preparation for the Polytechnic at Delft, or for the scientific branches of University education it leaves little to be desired. The value of practical or technical instruction cannot, of course, be exaggerated, but there is a danger in the Netherlands, as elsewhere, that the increasing demand for it may act prejudicially upon general education, which is the necessary antecedent to all successful specialization. Schools, moreover, with the shorter course, may easily make the instruction more practical; and some of them already have an extra class for technical commercial subjects. This type of school is likely to grow. In considering the question of general or technical education, it is worthy of note that the more enlightened educationists are agitating for new and distinct schools, at which general education alone shall be provided up to the age of 15 or 16, before there is any attempt to specialize. Opinion is still undecided whether Latin should be obligatory in such schools, and there is no immediate prospect of their establishment. Educationally, perhaps the chief criticism in regard to *Hoogere Burger Scholen* of five years is that their curriculum does not present such a "centrum" of study, as is to be found in the *Gymnasia*. In other respects their excellence is evident, and they offer just that degree of secondary education which is so much needed in England.

The scheme of studies has many features in common with that of the German *Realschulen*, but a comparison of the two lends some weight to the charge that the Dutch scheme is a little diffuse and lacking in concentration, owing chiefly to the

fact that Dutch pupils have to learn one foreign language more than corresponding pupils in France, Germany, and England :—

STATE HIGHER BURGHER SCHOOL AT UTRECHT.

Subject.	Number of hours given weekly in Class.				
	I.	II.	III.	IV.	V.
Mathematics	7	8	6	6	3
Mechanics	—	—	—	2	2
Physics or Technology	—	—	2	2	4
Chemistry	—	—	—	4	4
Biology or Geology	2	2	1	1	1
Cosmography	—	—	—	1	1
Communal, Provincial and National Institutions	—	—	1	1	1
Political Economy	—	—	—	1	1
Geography	3	2	2	1	1
History	3	3	3	2	2
The Mother-Tongue	3	3	2	2	2
French	4	3	3	2	2
English	—	4	4	2	2
German	3	3	3	2	2
Commercial Law	—	—	—	—	1
Book-keeping	—	—	—	1	1
Caligraphy	1	—	—	—	—
Freehand Drawing	2	2	2	1	1
Geometrical Drawing	—	—	1	1	1
Gymnastics	2	2	2	—	—
Total	30	32	32	32	32

The hours given to practical instruction in Physics and Chemistry are not calculated in the above Table.

BERLIN REALSCHULEN.*
(Class I. is the top of the School.)

Subject.	Number of Hours given Weekly in Class, Exclusive of Home Lessons.					
	VI.	V.	IV.	III.	II.	I.
Religion	3	2	2	2	2	2
Mother-tongue and Narration of National Historical Events	6	6	4	4	3	3
French	—	—	8	8	6	6
English	—	—	—	—	6	6
History and Geography	3	4	4	4	3	3
Mathematics	6	6	6	6	5	5
Natural History	2	2	2	2	2	—
Physics and Chemistry	—	—	—	2	2	4
Writing	3	3	—	—	—	—
Freehand Drawing	2	2	2	2	1	1
Total	25	25	28	30	30	30
Geometrical Drawing	—	—	—	—	2	2
Singing	2	2	2	2	2	2
Gymnastics	3	3	3	3	3	3
Total	30	30	33	35	37	37

* Special Reports on Educational Subjects, vol. i. C. 8447, p. 383.

The superb equipment of all the Higher Burgher Schools, which came under my notice, is beyond praise. In fact, the lavish manner in which schools of every description throughout the Netherlands, except occasionally the rural primary schools, are supplied with the most modern apparatus and expensive models affords striking evidence of the ungrudging spirit with which the State and the Municipalities alike regard the claims of education. To this every teacher bore willing testimony. No complaints that the instruction in any subject was defective from the want of appropriate material reached my ears. The most captious critic would fail to suggest any improvement in this respect at one of the Hague schools, to which Mr. ten Bruggencate courteously accompanied me. This Hoogere Burgher School, with a five years' course, is the property of the Municipality, but receives a State subsidy. It is the largest in Holland, and has 400 pupils with a staff of 35 teachers. The fees are 100 florins a year, and only a very few free scholars are admitted after a competitive examination. On the occasion of my visit, I do not think that there were more than two. Although there are now two schools of this type at the Hague, it certainly would appear that the educational interests of the poor are not very carefully considered, for the fees are beyond the means of the average artisan. A stranger cannot avoid noticing this, but the Hague is a wealthy city, and possibly no real difficulty exists. In every class the pupils showed the keenest interest in their work, and their close attention testified to the quality of the instruction. An enthusiastic teacher makes an enthusiastic pupil, and intelligent enthusiasm is a characteristic of all Dutch teachers. The teacher is *alive*; there is no ladling out of unrelated facts, and there is an entire freedom from dull mechanical methods. The lessons in Chemistry on gas factories, and in Botany, explaining why a flower turns to the light, struck me as particularly good. The Museum is liberally supplied with botanical, geological, choncolological, and other specimens. Both chemical and physical laboratories are light, airy, admirably arranged, and equipped with the best appliances. There is a fair gymnasium for the use of the three lower classes. The small botanical garden, however, is hardly upon a level with the rest of the school. On all sides I was assured that the pupils had been thoroughly grounded in the primary schools, except that occasionally they are a little weak in drawing.

At Utrecht I saw the State Higher Burgher School, the Director of which, Dr. Jonkman, received me most cordially. This is one of the original "model" schools, and was founded by the Government in 1866 at a cost of 100,000 florins for building and of 15,000 florins for apparatus. Its annual expenses are, of course, also wholly defrayed by the State. Dr. Jonkman's salary is at the rate of 4,000 florins a year without a house; the salaries of the other nineteen masters range from 2,000 to 3,000 florins. The fees are 60 florins. There is no competitive examination for free places, and the fees of six pupils had been remitted this year. The total number of pupils is 256, dis-

tributed in the following manner:—1st class: 52 boys, 8 girls; 2nd: 48 boys, 7 girls; 3rd: 53 boys, 5 girls; 4th: 40 boys, 2 girls; 5th: 34 boys, 5 girls. Two other pupils attend certain classes only. In all schools this is permitted, and the fees per subject at Utrecht vary from 10 to 20 florins. Forty of the pupils were entering for the final examination in June and July. The course of instruction is the same for boys and girls, except that the latter have no gymnastics. Science subjects are taught practically to the fifth class. Visits are frequently paid to factories to illustrate the lessons on particular industries. This universal custom of taking pupils periodically to see the subject-matter of various lessons with their own eyes cannot be too highly commended. As at the Hague, the Laboratories are spacious and fully equipped to the minutest detail. The room for drawing is furnished, as every such room ought to be, with sliding desks. There is a very fine gymnasium, decorated with trophies won by the pupils. The Botanical Garden is well supplied with a suitable variety of plants. Dr. Jonkinan regrets the fact that there is no playground, and he admitted in conversation that the opportunities offered to poor children for secondary education are not as great as they might be.* It should be added that pupils, who come from a distance to reside in the town, must be under the care of some responsible person. Appended is the time-table:—

* In 1901-02 the fees were remitted in the case of 226 pupils at the State Schools, the majority of whom also had free grants of books and apparatus

	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
	Class IVA.	Class IVB.	Class VA.	Class VB.		
	9.00 Stereometry 9.50 Mother-Tongue 10.40 Geography 11.30 Descriptive Geometry 1.30 Cosmography 2.20 Trigonometry 3.10 State Institutions	Geometrical Drawing Cosmography State Institutions English Political Economy Mechanics Trigonometry	The Mother-Tongue History of the Netherlands Mechanics Freehand Drawing Physics German Geometrical Drawing	History of the Netherlands Botany, Biology and Ge Physics The Mother-Tongue Descriptive Geomet Political Economy French		
	9.00 Mechanics 9.50 History of the Netherlands 10.40 Mother-Tongue 11.30 Chemistry 1.30 German 2.20 Botany and Biology 3.10 Algebra	The Mother-Tongue Chemistry Stereometry French Freehand Drawing Descriptive Geometry English	Descriptive Geometry Botany, Biology and Geology Chemistry German Political Economy Cosmography French	Chemistry Cosmography General History Freehand Drawing Mechanics German State Institutions		
	9.00 Chemistry 9.50 Physics 10.40 French 11.30 Geometrical Drawing	Physics Mechanics Chemistry French	Book-keeping The Mother-Tongue Physics Geometry	English Geometrical Drawing Geometry Chemistry		
	1.30 Physics 2.20 English 3.10 Chemistry	German Geography Physics	Chemistry Physics English	Geography Chemistry French		
	9.00 Descriptive Geometry 9.50 German 10.40 General History 11.30 Stereometry 1.30 Freehand Drawing 2.20 Mechanics 3.10 French	The Mother-Tongue Chemistry German General History Stereometry Botany and Biology Algebra	Chemistry French Mechanics Algebra and Trigonometry English Geography Physics	Book-keeping Physics Chemistry English Physics German Mechanics		
	9.00 Chemistry 9.50 Book-keeping 10.40 Political Economy 11.30 English	History of the Netherlands Chemistry Book-keeping Descriptive Geometry	Commercial Law General History Chemistry State Institutions	Algebra and Trigonometry Physics The Mother-Tongue Commercial Law		

; and on Saturdays from 1.15 to 2.45 p.m.

1000

1000

1000

1000

At Almelo, a small town in Overijssel, of about 8,000 inhabitants, the Municipal Higher Burgher School has one or two points of interest. Of the 78 pupils 30 are girls, and their classes in Mathematics, Physics, Chemistry, and Book-keeping are distinct from those of the boys. In each of these subjects the instruction is based, so far as possible, upon matters that fall within the experience of any ordinary woman. For instance, girls in the fourth class have an hour's lesson, once a week, upon the organic chemistry of vegetables and animal substances used as food. In applied chemistry they receive suitable instruction upon the preparation of solid and liquid foods, and their respective nutritive values. In addition to this they are taught the various laws of health for an hour every week. Somewhat unusually all pupils (boys and girls) have an hour and a half's religious instruction once a week. This Syllabus illustrates the freedom allowed under certain circumstances in determining the character of the curriculum. For this small school there is a staff of ten teachers.

The general curriculum of schools with a three years' course does not materially differ from that of the others. Where, as at the Municipal School at Utrecht, there is a fourth year for a commercial class, special attention is paid during that year to Applied Science, the Knowledge of Wares, Commercial Geography, and Commercial History.

Higher Burgher Schools for Girls (*Hoogere Burger Scholen voor Meisjes*).—With the establishment of these schools the Government in no way concerns itself. Article 21 of the Act of 1863 merely declares that the provision of secondary education for girls is left entirely to the municipal and provincial authorities, or to private individuals, whether the schools receive a State subsidy or not, except that, if they do receive a subsidy, they must conform to certain regulations. Of the existing twelve schools none has now any aid from the Government, although formerly it was given in some cases. This does not appear to be due to any parsimony on the part of the State, but to the extreme liberality of the communes. The schools are, however, subject to Government inspection, and their situation is officially described in the Annual Report.* Each school is free to determine its own curriculum, which generally includes Mathematics, Physics, Chemistry, Natural History, History, Geography, Dutch, French, English, German, Needlework, Drawing, and Gymnastics. The fees range from 50 up to as much as 400 florins a year at the Amsterdam private school. In 1898, there were only 12 free pupils altogether. The course is invariably one of five years, except at Deventer, where it is a year less, but where the pupils are admitted one year later, the four classes being equal to the four highest classes of a five years' school. This school, moreover, has a Director and no Directress. For the final examination diplomas or certificates are awarded. Out of 1,134 candidates in 1898, 984 were successful. The certificate, however, is of no value in itself; it does not

* Report, 1900, pp. 142 and foll.

admit either to the Polytechnic, at Delft, where there are usually a few lady students, or to the Universities. If a girl wishes to proceed to the University, she will require two years' private tuition in Latin and Greek to enable her to pass the State entrance examination. This is felt to be a grievance, and is perhaps the weakest side of the secondary education of girls. A proposal has been made that pupils in the fifth class at school should be divided into two groups; the first of which would consist of those who did not wish to matriculate and would follow the ordinary curriculum, while the second group, composed of intending University students, would learn Latin and Greek, and remain a sixth year at school to continue their studies. For other reasons, there is a bi-furcation in the last two classes at the Gymnasias, where, however, it is, as will be shown, rather harmful than beneficial. In the case of the intermediate schools for girls, there does not appear to be any objection to the proposed change, since no girl could be said to lose any of the advantages, which she might otherwise obtain from following the usual lessons only. The prolongation of her school-career would obviate this, and would in itself be of distinct service. At the end of the course girls would go in for the same final examination as boys. Whether the present Government will agree to the proposal is very uncertain. The salaries of the Directresses average about 2,600 florins a year, with or without a house or a lodging allowance. Other members of the staff receive from one to two thousand florins a year. The number of teachers in 1898 was 174, of whom 40 were masters, and the number of pupils was 1,586.

Both at Arnhem and Utrecht I visited excellent girls' schools. The fees at the former are 60 florins a year, and the pupils number 86, with a staff of 14 teachers. In addition to the usual subjects pupils in the fifth class have two hours' instruction each week in human anatomy, care of the person, pollution of the air and how to remedy it, the effect of light and the nature of the soil upon health, the importance of proper clothing, the values of different foods, the influence of exercise upon the spirits, and the causes of the commonest illnesses and their prevention. The whole scheme has been well thought out; every thing is taught simply and practically. The lessons in chemistry are applied to Domestic Science. For classes four and five some really beautiful diagrams and models have been provided for Art instruction (*Schoonheidsteer*). One of the best lessons, which I happened to hear there, was on "Nature-study" to the third class: each of the girls had a quantity of flowers and plants gathered by herself. All the flowers were in turn dissected and their structure explained on the Socratic method, no text-book being used.

At Utrecht the curriculum is less varied, but it would be difficult to find a school more fully equipped in every particular. Mej. Nicolai, its very able directress, spoke in terms of the warmest appreciation of the generosity of the municipality. No

1. The first part of the document is a list of names and addresses of the members of the committee.

GIRLS, UTRECHT, 1900-1901.

Class IIIA	Class IIIB	Class IV.	Class V.
History	French	Physics	The Mother-Tongue
Drawing	English	History	German
English	History	Needlework	History
Geography	Natural History	French	History of Art
Arithmetic	The Mother-Tongue	The Mother-Tongue	Natural History
Natural History	Drawing	Arithmetic	French
		Gymnastics	Gymnastics
Mother-Tongue	German	Physics	English
German	Arithmetic	History	Needlework
English	Geography	German	Arithmetic
Arithmetic	The Mother-Tongue	Geography	German
German	Arithmetic	Arithmetic	English
French	English	German	Physics
Natural History	French	English	Geography
		Gymnastics	Gymnastics
French	Physics	The Mother-Tongue	Arithmetic
English	Needlework	History	French
History	Geography	English	History
Mother-Tongue	German	Drawing	History of Art
Needlework	English	Drawing	German
Arithmetic	Drawing	French	Natural History
Gymnastics	Gymnastics		
English	History	Physics	Geography
Physics	Arithmetic	English	History
Geography	Needlework	History	The Mother-Tongue
Drawing	Natural History	Arithmetic	French
Mother-Tongue	French	Needlework	Drawing
History	English	German	Drawing
German	The Mother-Tongue	French	Physics
French	German	Geography	The Mother-Tongue
Needlework	History	The Mother-Tongue	English
Gymnastics	Gymnastics		

reasonable request is ever refused. Her salary is 3,000 florins a year with a house; that of her 16 assistants averages above 1,500 florins. For pupils residing at Utrecht, the fees are 60 florins a year up to the third class, afterwards 100 florins; for those from outside 100 and 140 florins respectively. This year the number of pupils is 150, of whom five are free. There is an entrance examination, but this is not insisted upon in the case of girls from some schools. The age of the pupils is from 12 to 18 years. Those of the highest social position attend unless they have a governess at home. Some old pupils proceed every year to the Universities. Several are now studying literary subjects, two Theology, and one Law at Utrecht University. It is not unusual in the Netherlands for ladies to become "preachers" or teachers of religion for children and young people. A large proportion of the best pupils go afterwards as teachers in the public schools. With Mej. Nicolai I had a most interesting conversation upon the whole question of the modern education of girls. She informed me of the strong feeling prevalent in Holland, that there is a danger of its tending to make young women disparage household duties, and consider them beneath the notice of an "educated" person. This tendency may be to some extent counteracted by making the instruction, as at Arnhem and Almelo, bear upon domestic matters, and by directing the minds of the pupils towards the responsibilities, which await them as wives and mothers. In this way, Mej. Nicolai thinks that something in the way of Domestic Science may be taught from an educational standpoint at these higher schools for girls, but she does not see how it can be practically taught for utilitarian purposes without interfering with the rest of the curriculum. For girls of the lower classes much has been done by the establishment of Industrial Schools, and for others there are excellent Housewifery Schools; both of these are described later. In developing this work no one has taken a more active part than Mevr. Muller, of Utrecht, whose interest in all that affects the well-being of women is not confined to Holland only, and from whom I received much valuable information.

Subjoined is the Time-table of Mej. Nicolai's School:—

	I.	II.	III.	IV.	V.	TOTAL.
Mother-Tongue - - - -	4	3	3	3	3	16
French - - - - -	4	3	3	3	3	16
German - - - - -	4	3	3	3	3	16
English - - - - -	-	5	4	3	3	15
Geography - - - - -	3	3	2	2	2	12
History - - - - -	2	2	3	4	3	14
Mathematics - - - - -	4	3	3	3	2	15
Natural History - - - -	2	2	2	-	2	8
Physics - - - - -	-	-	1	3	2	6
Writing - - - - -	1	-	-	-	-	1
Drawing - - - - -	2	2	2	2	2	10
Needlework - - - - -	2	2	2	2	1	9
History of Art - - - - -	-	-	-	-	2	2
Gymnastics - - - - -	•	•	2	2	2	6
	28	28	30	30	30	146

Higher Education

Haguer Institutions

Higher Education as defined by the Law of 1875 is given in the *gymnasiums*, *universities*, the *scholastic institutions*, and in the *Universities of Letters, Theology, Jurisprudence*. Prior to 1875 there were numerous Latin Schools and a few of which still survive, and four *scholastic institutions* (*Universities of Letters, Theology, Jurisprudence, and Medicine*), in addition to the *universities*. If the *scholastic institutions* all have disappeared, or the use of *universities* which was commenced in 1875 in *Wurtemberg University*.

Gymnasiums.—By Article 1 of the Law of 1875 every town with a population of 30,000 must provide a *Gymnasium*, is specially relieved from the obligation. All towns of this size have their *Gymnasiums* with the exception of *Rotterdam* (para. 24) and *Tilburg* (para. 30, 31, 32). *Rotterdam* has been exempted because of its poverty and at *Tilburg* the population consists not of artisans or of Catholics who go elsewhere to school. Towns with a population less than 30,000 may also have a *Gymnasium* such for instance is the case at *Tiel* where there are not more than 11,000 inhabitants. There it was thought desirable to remodel the old Latin School and bring it into conformity with the regulations promulgated in 1875. Twenty-five of the *Gymnasiums* are subsidized by the State to the extent of their annual expenses after deducting therefrom the amount received in fees. All the expenses of the *Gymnasiums* at *Hague*, *Amsterdam*, *Rotterdam* and *Kampen* are defrayed by the respective *Municipalities*. *Kampen* is extremely rich and the other three towns have voluntarily undertaken responsibility. In 1899, the total cost of the schools to the State was 2,225,500 florins, and to the communes 592,554 florins.

The affairs of each *gymnasium* are administered by a college of curators, nominated by the Municipal Council. The appointment of teachers, upon the recommendation of the curators and the advice of the inspector, and their dismissal rest with the Municipal Council, which fixes the rate of their salaries subject to approval by the Minister of the Interior. All teachers except those for English, French, and German, must possess a degree of Doctor for that subject, in which they are to give instruction; in the three modern languages the qualification to teach them at an intermediate school is held to be sufficient. No one is allowed to teach at any school of any grade in the Netherlands without official sanction. This applies equally to foreigners engaged to teach their own language, and to the authorization granted by the Queen Regent, in 1897, to

Oxford graduate to teach English at the well-known private gymnasium at Voorschoten, of which some account appears later, is now lying before me. The number of teachers at the gymnasia in 1899 was 429. The salary of a Rector (*i.e.*, the Principal) ranges from 2,600 florins at Nijmegen, where he is provided with a house, up to 5,000 florins per annum: that of the professors or assistant—masters from 1,000 to rather more than 2,500 florins per annum. The scale of the pupil's fees, which usually vary from 60 to 100 florins a year, is also determined by the local authority, provided that it does not exceed 100 florins, the maximum named in the Act of 1876, and that no pupil pay more or less than another pupil in the same class. This rule has, however, been modified by the Law of July 9th, 1900. For the future, the restriction as to the payment of a like fee by all pupils in the same class is removed, but no pupil is to pay more than the average actual cost of a pupil, and the minimum for the lowest class cannot exceed 100 florins. The difference in the fees payable will be determined by the income of the parent, as ascertained by the amount of his income-tax in those towns where such a tax is paid. The fees for pupils living outside the area of the local authority must be submitted to the Minister of the Interior for approval. This Amendment to the Law of 1876 has not yet been applied, but Dr C. J. Eggink, Inspector of Gymnasia, with whom I had the advantage of a long interview, and who kindly rendered me every assistance, believes that the higher fees will eventually be charged at many of the schools. There are no scholarships or bursaries, and the fees were remitted in the case of 23 pupils only in 1898. No boarders are taken, and little appears to be done to foster any organic public school-life. Few of the schools have play-grounds, and there are no clubs or associations of past students.

The school-year always begins on the 1st of September, and the course is of six years' duration. The usual vacations are from 10 to 14 days at Christmas and Easter, and 7 weeks in the summer from about the 12th of July. Girls are now admitted to the gymnasia upon the same terms as boys, since there are no girls' schools of a corresponding grade. They are, however, still excluded from the gymnasia at 'S-Hertogenbosch and Maastricht, where the Catholics, who dislike co-education, are in a large majority. In 1899 the total number of pupils was 2,544, of whom 155 were girls. There is an entrance examination into either the lowest or a higher class; at the former, in the above year, 77.1 of the 513 candidates were successful; for the latter 140 were examined, of whom 72 succeeded and 29 were placed in a lower class. The comparatively large number of failures in the last instance would imply that the test is somewhat severe. Diplomas, admitting to the Universities, are awarded at the final examination in June and July. Candidates are examined either for the Faculties of Theology, Law, Literature, and Philosophy, or for those of Medicine, Mathematics, and Science. For the

named 208 candidates were examined in 1899, of whom 175 obtained diplomas; for the second, out of 71 candidates, 66 were successful. These examinations are conducted by the staff of each school, under the supervision of Government Delegates, usually three in number. As a rule, the Inspector is one of them. For every three schools, the same delegates are generally appointed. Eight or nine such examining committees are sent to the different schools. A special commission is also annually appointed, in accordance with Article 12 of the Law of 1876, to examine other students for the above diploma. From the Report* of the Commission for 1899, it appears that rather less than half of those who had given in their names were successful that year.

The curriculum is the same for all schools. The obligatory subjects named in Article 5 of the Law are—Greek, Latin, Dutch literature, French, German, English, History, Geography, Mathematics, Physics, Chemistry, and Natural History. Hebrew and gymnastics are optional. No class may contain more than 24 pupils; when that number is exceeded, they must be taken in separate divisions. All pupils receive the same instruction in the first four classes. In classes V. and VI. there is the bi-furcation already referred to: those who are preparing for Theology, Law, and Philosophy form one division (A), those preparing for Medicine, Mathematics, and Physics another (B). The former have more instruction in philological subjects, and the latter in science. This bi-furcation, which dates from 1876, is the most unsatisfactory feature in the organization of the gymnasia. It must dislocate the work of the school to a considerable extent, and Dr. van Aalst, Rector of the Hague Gymnasium, considers that the lessons in the so-called exact sciences are far from being sufficient. The University Professors, however, are, as a rule, satisfied with the pupils from division B after one or two years' further study, but there is a danger lest this attempt to combine scientific with classical studies at school should cause the pupils to learn "little science and less Greek." The question has been hotly discussed whether a classical education must still be held indispensable for all those who wish to obtain higher culture, or must be more or less sacrificed to the exigencies of modern science and society. By introducing the distinction between the two classes of pupils, the Legislature has tried to conciliate both views, and the compromise is not a success. In Dr. van Aalst's opinion, the system is altogether a mistake. Irrespective, moreover, of the future career of the pupils, the value of the mental training, which the classics peculiarly afford, can hardly be exaggerated. As Mr. ten Bruggencate aptly observed: "Though the pupils may forget their Latin and Greek, they will retain what makes the study of those languages so valuable, thus illustrating Lessing's

* Report 1900, app. D., p. 4.

well-known saying, 'Aus einem tüchtigen Philologen lässt sich alles machen.'” Again, the easy terms upon which pupils from the Higher Burgher Schools may obtain a certificate, entitling them to work for a Doctor's degree in any of the Faculties, tend to some depreciation of ancient literature. Some of these pupils, who are in possession of the final Diploma from their school, can satisfy the examiners after one year's preparation in Latin and Greek. Such cases are rare, however, and would be impossible, if any real knowledge of those languages were insisted upon. At the same time, the demand in the Netherlands that every well-educated person should know French, German and English has encroached to some extent upon the time that might otherwise be devoted to Greek and Latin at the gymnasium. Still, as Dr. van Aalst says, it is much easier to detect faults and gaps than to indicate how they can be corrected or filled up, and there can be no doubt that the gymnasium on its strictly philological side does provide an excellent general education. There is that definite “centrum” of study, which, as was shown, is somewhat lacking in the Higher Burgher Schools.

Appended is the scheme of weekly lessons at the gymnasium at the Hague:—

Subject.	Number of Hours given Weekly in Class.									
	I.	II.	III.	IV.	V.			VI.		
					Div. A.	All.	Div. B.	Div. A.	All.	Div. B.
Greek Language and Literature -		to Jan. 1 8	6	7	2	4	—	3	4	—
		after Jan. 1. 5	—	—	—	—	—	—	—	—
Latin Language and Literature -	8	6	6	6	3	5	—	4	4	—
Dutch Language and Literature -	3	2	2	2	—	2	—	—	1	—
French - - -	4	2	2	2	—	1	—	—	1	—
German - - -	—	after Jan. 1. 3	2	2	—	2	—	—	1	—
English - - -	—	—	3	3	—	2	—	—	1	—
History of the Netherlands -	1	1	1	—	—	—	—	1	—	—
General History -	3	2	2	3	1	1	—	—	2	—
Geography - -	3	2	1	—	—	—	—	—	1	—
Mathematics - -	4	3	3	3	—	2	3	—	2	3
Physics - - -	—	—	—	—	—	2	1	—	2	1
Chemistry - -	—	—	—	—	—	—	1	—	—	1
Natural History -	2	2	—	—	—	—	2	—	—	2
Total - -	28	28	28	28	6	21	7	8	19	7

It may be of interest to compare the scheme of weekly lessons recently drawn up for the Prussian Gymnasia with the above.

(Class I. is the top of the School).

Subject.	Number of Hours given Weekly in Class.*								
	VI.	V.	IV.	Lower III.	Upper III.	Lower II.	Upper II.	Lower I.	Upper I.
Religious Instruction - - -	3	2	2	2	2	2	2	2	2
Mother-Tongue and - - -	3 } 4	2 } 3	3	2	2	3	3	3	3
National History - - -	1 } 1	1 } 1							
Latin - - - - -	8	8	8	8	8	7	7	7	7
Greek - - - - -	—	—	—	6	6	6	6	6	6
French - - - - -	—	—	4	2	2	3	3	3	3
General History - - - -	—	—	2	2	2	2	3	3	3
Geography - - - - -	2	2	2	1	1	1	—	—	—
Mathematics - - - - -	4	4	4	3	3	4	4	4	4
Natural History - - - -	2	2	2	2	2	2	2	2	2
Writing - - - - -	2	2	—	—	—	—	—	—	—
Drawing - - - - -	—	2	2	2	2	—	—	—	—
Total - - - - -	25	25	29	30	30	30	30	30	30

* The brackets imply that the number of hours assigned to the branches thus joined may in some cases be distributed differently.

One gymnasium does not materially differ from another except in size and the arrangement of the time-table. That at the Hague may be taken as typical of the rest. The fees are 100 florins a year. The staff consists of Dr. van Aalst, and of Dr. van Benten as co-Rector, with twenty-three assistant-masters. There are now 210 scholars upon the books. Girls have only been admitted within the last four years, and their numbers have increased from 12 in 1898 to 40 in the present year. Four of these are in the two highest classes, studying for Theology, Law, and Literature. The total number of pupils in Classes V. and VI. is 28 and 22 respectively, of whom six and four are preparing for Physics and Medicine. So far as one can gather the number of pupils in Division B of Classes V. and VI. is relatively small at all the gymnasia, and hardly seems to justify the system of bi-furcation. For the entrance examination in July, in addition to the usual subjects of the primary school, a fair elementary knowledge of French is required. The conspicuous success of one of Dr. van Aalst's pupils this summer deserves to be mentioned. He was only in Class V. but followed the whole course of study in both Divisions, and presented himself at the States Examination, before the Special Commission at Utrecht, where he obtained both diplomas at once, passing with the greatest credit.

The following is the time-table for 1901-1902:—

Days.		as VI.	
Hours.		Division II.	
MONDAY			
9—10	Ma		Latin
10—11	N		Mathematics
11—12			Mathematics (A) } Mathematics (B) }
2—3			Latin (A)
3—4			History (A)
TUESDAY			
9—10			Dutch
10—11	He		Physics
11—12	N		Gen. History
12—1			
1—2			Hebrew
2—3			Greek
3—4	G		History (B)
WEDNESDAY			
9—10			French
10—11			Mathematics
11—12			Latin (A) } History (B) }
12—1	N		Greek
THURSDAY			
9—10			Physics
10—11	M		English
11—12			Mathematics (A) } Mathematics (B) }
12—1			Hebrew
1—2			Mathematics (B) }
2—3			Latin (A) }
3—4	G		Latin
FRIDAY			
9—10			Latin (A) } History (B) }
10—11	G		Latin
11—12	M		Geography
2—3			German
3—4			Greek
SATURDAY			
9—10			Greek
10			Latin
11—12			Mathematics (A) } Mathematics (B) }
12—1			Gen. History



The small school at Tiel, referred to above, has one or two features of interest, and is a good example of local enterprise in providing a gymnasium. There are only 34 pupils, including two girls. Twenty of these come from the surrounding districts or from larger towns. The latter board at one of the master's houses, and are sent to Tiel because it is believed they will receive more individual attention at a school of this size. This is not unlikely, for the staff consists of twelve teachers. Mathematics are taught by a lady graduate, the only female teacher at any gymnasium. As far as possible, the same master takes the same pupils throughout the whole course. Thus the one, who takes Latin in Class I. now, will move to Class II. next year and so on. Tuesday afternoon is left free for religious instruction, which is, of course, optional, and for which no special provision is usually made. It is estimated that the cost of maintaining the school is about 20,000 florins a year, towards which the State gives a subsidy, amounting in 1899 to 8,555 florins; the fees are 70 florins a year; the annual expense to the Municipality must therefore average about 8,000 or 9,000 florins. Unfortunately, I was unable to visit this school, but the Rector, Dr. L. C. de Boer, courteously furnished me with these particulars.

Private Higher Education (*Bijzondere Hooger Onderwijs*).—Those who wish to establish any private school for higher education must inform the Minister of the Interior of their intention, and supply him with a copy of the regulations. The annual reports must also be forwarded, otherwise they are quite free to determine their own curriculum. Except in several of the Catholic Gymnasias, Colleges, and Latin Schools, this, as a rule, is similar to that of the public schools.

Amongst the private schools, the one at Voorschoten occupies a prominent position. Its history is interesting, and in some respects it resembles an English Public School. It was founded by Petrus de Raadt, who in 1820 turned his country seat, "Noorthey," by which name the school is still known, into a boarding-school for boys. He seems to have been a man of very enlightened views, and always insisted upon the importance of distinguishing education from mere instruction. He maintained that the two ought not to be separated, but that if a master is to form the characters of his pupils they must be entrusted wholly to his care. "Boarding-schools," he said, "offer advantages which cannot be obtained without them, for, as their whole aim is the education of the young, everything connected with them can and must be arranged suitably to that end." These ideas he put into practice, and the school came to be regarded as a model. In 1851, he appointed a Board of Governors, to whom he bequeathed his entire fortune. An account of the school and of de Raadt's methods was given in 1864 by Alfred Elwes, a former master, in his "Luke Ashleigh, or School Life in Holland" (Griffith and Farran). The establishment of the *Hoogere Burger Scholen* and the organization of the *Gymnasias* robbed the school of some of its old prestige. It failed to

adapt itself to the new movement, and for a time became totally eclipsed. Reopened in 1888, it gradually recovered the lost ground, and, under the present headmaster, Dr. J. W. Lely, is again considered by the aristocracy, many of whose names appear in the list of pupils, as their leading school. The inclusive fees for board and tuition are 1,600 florins per annum. The curriculum is determined entirely by the head-master, and embraces the subjects usually taught at a gymnasium. Religious instruction is given in accordance with the principles of the Dutch Reformed Church. The pupils are divided into two groups. Group A consists of those who are being prepared for the Universities. Group B is subdivided into three classes: (a) those who are being prepared for a commercial career; (b) a class for the Army, Navy, and Civil Service; (c) those who desire a general education with Latin as its foundation. The majority of the pupils proceed to one or the other of the Universities. Individual attention is carried to its most extreme limits. There are no classes in the ordinary sense. Each boy receives that amount of instruction per week in all his subjects, which the head-master believes to be necessary in his particular case. The school is provided with a gymnasium, where fencing is also taught, and a swimming bath. It stands in well-wooded grounds with ample playing fields. Lawn tennis and football are extremely popular, the latter being played far on into the summer, but cricket has never been taken up. For some reason or other the boys dislike it.*

The Universities (*Rijks-Universiteiten*).—The Universities of Holland have, at several times and in many ways, rendered very great service to the intellectual life of Europe. But any detailed account of University education would be beyond the scope of this paper. It will be well, however, to refer briefly to its organization. Each of the three Universities, Leiden, Utrecht, and Groningen, has the following faculties:—(a) Theology, (b) Law, (c) Medicine, (d) Science and Mathematics, (e) Philosophy and Literature. Each is administered and superintended by a College of Curators, composed of not less than three and not more than five members, who are appointed by and hold office at the will of the Crown. The Crown also has the appointment and removal of all professors. Their minimum salaries are 4,000 florins a year; after five years' service, 5,000; and after ten years' service, 6,000 florins. At the age of 70 they are obliged to retire, and become entitled to a pension. Some of the instruction may be given by lecturers and private tutors. At Leiden the number of professors and lecturers is 46 and 4 respectively; at Utrecht, 38 and 4; at Groningen, 36 and 2. In 1899, the number of students at Leiden was 802; at Utrecht, 722; and at Groningen, 391. These figures are all rather below those of the previous year. The average

* Further information concerning Noorthey may be obtained from the following books:—"Noorthij, Huis van opvoeding en onderwijs" by Petrus de Raadt (P. N. van Kampen, Amsterdam), and "Herinnering aan Petrus de Raadt" by J. H. Kramers (H. B. Kramers, Rotterdam).

duration of the courses is—for Theology five years, for Law four, for Medicine eight, and for the other Faculties six. Fees are payable for four years, and they amount to 200 florins per annum in each course. A few Bursaries or Scholarships are annually offered in each of the Faculties. To obtain the degree of Doctor it is necessary to pass two examinations (*Candidaats en Doctoraal Examens*), and to write a treatise upon some stated subject. In Law, however, at least 24 essays upon legal questions must be written, instead of the more formal treatise. The number of Doctors' degrees granted in 1899 was 72 at Leiden, 48 at Utrecht, and 25 at Groningen. The State expenditure upon the Universities amounted that year to 1,772,067 florins.

The Municipal University at Amsterdam.—As previously mentioned the famous Athenæum was converted into a University in 1877. It differs from the other Universities in the following respects. The College of Curators consists of five members, two of whom are appointed by the Crown, and two by the Municipal Council, with the Burgomaster as *ex-officio* President. The Municipal Council appoints the Professors, of whom there are 44, with one lecturer, but their appointment must be ratified or sanctioned by the Ministers of the Interior. The number of students in 1899 was 910, including 38 ladies. The cost of maintaining the University was 344,760 florins, towards which the State contributed 3,000, and the Province of North Holland 10,000 florins.

The total sum expended by the State, the Provinces, and the Communes, upon higher education in all its branches, amounted in 1899 to 3,047,549 florins; in 1889 it was 2,547,527 florins.

There is also a Free University at Amsterdam, founded in 1880 by the Association for Reformed Higher Education. It is administered by five Directors, elected by the members of the Association, and the instruction is under the control of five Curators, appointed by the Directors. The Faculties are those of Theology, Law, and Philosophy and Literature. There are five Professors, and the number of students is about 115.

TECHNICAL AND PROFESSIONAL INSTRUCTION.

Trade-schools (*Ambachts-scholen*).—These admirable institutions owe their origin entirely to private or local initiative. The first was founded at Amsterdam in 1861. Their present number is twenty. They have always been subject to Government supervision, but a special Inspector of them was not appointed until 1899. In March of that year, after a long dispute as to whether the Inspector should be an essentially practical man, or one who had received the highest technical training, it was finally decided in favour of the practical man, and Mr. de Groot was wisely selected for the office. His keen enthusiasm for the work greatly impressed me, and his remarkable success previously at Alkmaar testifies to his exceptional powers of organization. Since Mr. de Groot's appointment the Government grants, which date from 1891, have more than doubled, and so popular have the schools become that they can now get more State-aid, proportionately, than the secondary

schools. In 1899, the last year for which the actual statistics are available, the Government subsidy amounted to 101,250 florins. In addition to this a special grant of 2,000 florins was made to the Province of Drenthe. This is a very sparsely populated district, and it has been found preferable to apprentice promising children, whose primary school record is satisfactory, to competent workmen, rather than to establish a distinct school. This scheme was originated by a local Society for the Advancement of Education, and has answered well. A similar plan has been suggested for the neighbourhood of Brielle (South Holland). The course generally lasts for three years, except at Amsterdam, where it is for two years, and the instruction is continuous throughout the year. The subjects naturally depend, to some extent, upon local circumstances, but they usually include Drawing, Geometrical Drawing, Physics, Mathematics, Mechanics, Wood and Metal Work, all taught technically, and with a view to particular industries. In some cases, instruction is also given in Masonry (as at Arnhem), Furniture and Instrument making, Painting and House Decoration. The results are, undoubtedly, excellent. For some time artizans were a little jealous of this trade instruction, but now there is an increasing demand by them for lads who have completed the school course. It is intended that pupils should come direct from the primary school at the age of 12 or 13, and this is the general custom. A few boys occasionally attend after leaving the intermediate schools or the gymnasia. The ages of the 2,884 pupils in attendance in 1899 were as follows:—below twelve 5, from twelve to fourteen 881, from fourteen to sixteen 1,457, from sixteen to eighteen 462, and above eighteen 79. The parents of 1,482 were tradesmen, of 339 shopkeepers and clerks, of 114 architects and artists, of 316 public officials, teachers and soldiers; the parents of 112 followed no regular occupation, and those of the remainder were distributed among a variety of industries. At Gorinchem, Zierikzee and Goes there are no fees; elsewhere, the average fee is from 5 to 10 florins a year, but there is no difficulty in obtaining free admission. The fees of 558 pupils were remitted in 1898, and those of 174 others were paid by friends or societies. All apparatus is found, and occasionally prizes are given, but on the whole it has been thought inexpedient to encourage competition amongst the pupils. Those who go through the entire course, almost always receive gifts of apparatus on leaving. Except at Dordrecht, Gorinchem, Middelburg, and Zierikzee there is an entrance examination, unless a certificate from the primary school be accepted instead. Out of 1,050 candidates in 1898, 728 were admitted. At the conclusion of the course diplomas or certificates are given. The salaries of the teachers vary considerably. At 'S-Hertogenbosch, for instance, the director only receives 900 florins per annum for 2,080 lessons; while, at one of the Amsterdam Schools, the director has 3,000, together with a house for 468 lessons. There is a similar inequality in the salaries of the assistant teachers. The total expenditure by the State, the Provinces, the Communes, and various Societies upon

SCHOOL, ARNHEM, 19

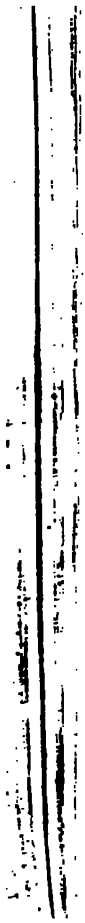
Do not subjects.

I & III F.		
Ia & III C.	II & III F.	
II C.	I & II F. S.	
Ia & III C.	II & III F.	II & III P.
Ia & III C.	I, I & II F. S.	II & III P.
	I, I & II F. S.	I P.
Ia & III C.		II & III P.
II C.	I, I & II F. S.	I P.
II C.	I, I & II F. S.	I P.
Ia & III C.	II & III F.	II & III P.
Ia & III C.	II & III F.	II & III P.
II C.	I, I & II F. S.	I P.
II C.	II & III F.	II & III P.
		I P.
		I P.

The Roman figures indicate the different classes.
The letters refer to the various trades or subjects of instruction :—

- C. Carpentry.
- E. Embossing.
- F. Furniture-making.
- I. Iron or smith's work.
- P. Painting.
- S. Stone-masonry.
- S. E. Instruction in the management of Steam Engines.

When any of the first six of these letters are placed beneath the number of a class, it shows what pupils are attending that class.



these Schools amounted in 1899 to 257,774 florins, private individuals contributed 16,862, interest on capital came to 14,437, school fees to 15,347, the sale of work 9,987, and miscellaneous sources of income furnished 15,530 florins.

At Arnhem I saw one of the most prosperous of these schools. It has recently been considerably enlarged and improved, especially by the provision of a new smithy and the removal of certain classes into better rooms. The number of pupils has increased from 251 in April, 1900, to 322 in April, 1901, when the present course commenced. These pupils, 253 of whom are below 16 years of age, are learning the following trades:—140 smiths, 95 carpenters, 37 furniture-makers, 32 painters, and 18 masons. The parents of all, with the exception of 44, are engaged in some industrial pursuit. For the really poor there are no fees, those who are badly off pay 5 florins, and those who can afford it from 10 to 50 florins a year, according to their position as estimated by the Finance Committee. Thanks to a bequest, the governing body are able to send one pupil a year to pursue his studies elsewhere in the Netherlands or abroad. This year one has been sent for a two years' course at the physical laboratory at Leiden. Wide-spread interest in the school is evidently taken by the whole community to judge from the numerous gifts of money and appliances to improve the instruction. An annual exhibition of the work is held in March; much of this is permanently on view, and many of the specimens, especially in furniture and decorative art, are excellent both in quality and design. One could readily understand the pride with which the director, Mr. Boot, displayed what had been done. The annual cost of maintaining the school is about 35,000 florins, towards which the State contributes 1,200, the Province of Gelderland 3,000, and the Commune of Arnhem 13,500 florins. The general character of the instruction may be gathered from the time-table:—

Industrial Schools for Girls (*Industrie-scholen voor Meisjes*).—Like the above schools, these are also due to local or private initiative, but, although they were only brought under Government inspection two years ago, they received State-aid before the boys' schools. In both cases, there must be an ample guarantee or adequate local support out of the Communal Poll Tax and the Provincial Personal Tax before the Government will make any grant. For the girls' schools it is now rightly made a further condition that, in addition to the day classes, they must provide evening classes for those engaged in domestic service, shops, or factories. The general idea of the schools is to give a girl such a training as to qualify her to become a capable housewife. There is no doubt that the provision of systematic practical instruction in domestic matters for girls directly they leave the primary school is of the greatest possible service, and it is encouraging to learn that Mr. Rooper, H.M.I., hopes shortly to establish a school upon similar lines in the Isle of Wight. Many small endowed schools for girls, now serving no useful purposes, might with advantage be remodelled in the same way. The course of instruction is for three years, with extra classes for certain subjects, and it is continuous throughout the year. The terms of admission are like those at the boys' schools, but the fees are generally a little more, and the social status of many of the pupils is as a rule rather higher. Frequently, too, young women between twenty and twenty-five years of age are in attendance. The programme of studies is determined locally; beyond a continuation of the primary school subjects, it usually comprises instruction in Dressmaking, Book-keeping (household accounts), Hygiene, First Aid, the care of children, the knowledge of Wares (their quality and value), and, in a few instances, a Modern Language, Laundry work and Cookery. The latter subject is taught at Alkmaar, Arnhem, and Zwolle. For some time the State refused to do anything to promote instruction in it, but the universal feeling that a purely theoretical training led women to neglect household duties finally overcame this prejudice. In the cooking-lessons care is always taken to use utensils ordinarily found in the homes of the poor. The teachers go through special schools, *e.g.*, at the Hague and Amsterdam, and have to pass an examination, for which diplomas are given. These experts are very carefully watched to ensure that their teaching shall be essentially practical. Good text-books have been prepared. As yet there are only six Industrial Schools, but all the preliminary arrangements have just been completed for the official recognition of three more schools at Haarlem, Groningen, and Utrecht. Some idea of the annual cost of maintaining such a school may be obtained from the balance-sheet for 1899 at Arnhem, where there are 160 pupils and a staff of 14 teachers. The ordinary fees for the three years' course are 15 florins per annum: for the extra classes they vary from 20 to 40 florins.

BALANCE-SHEET, 1899.

Expenditure.	Florins.	Income.	Florins.
Cost of Administration -	334·70½	Balance from 1898 -	735·09½
Furniture and Insurance -	110·36½	School Fees -	2,543·66
Salaries - - - -	8,964·48	Sale of Work -	1,241·38
Hire of Building - -	1,000·20	Private Donations -	1,069·50
Land Tax - - - -	119·29½	State Subsidy -	3,500·
Fire and Lighting - -	367·76	Provincial Subsidy -	1,000·
Pension Fund - - -	240·	Communal Subsidy -	6,000·
Rent - - - - -	1,306·78½	Sundry Receipts -	104·10
Material - - - -	1,024·21½		
School Necessaries - -	210·31		
Miscellaneous Expenses -	224·42½		
Water Rate - - - -	8·77½		
Cookery School - - -	150·		
Balance - - - - -	2,132·42		
	16,193·73½		16,193·73½

Visitors to the Netherlands, whether they are simply perplexed by the dearth of competent domestic servants in England, or are anxious to learn how the deplorable ignorance of the duties of a wife or mother, that prevails so largely amongst the English working-classes, may be removed, could not spend a few hours more profitably than in seeing one of these schools. The only effective way of providing efficient training for domestic service or domestic life is by giving a girl, as soon as she leaves the primary school, a *systematic* course of instruction up to the age of fifteen or sixteen. Spasmodic and occasional lectures are of little permanent benefit. Such a fee as that charged at Arnhem—£1 6s. 8d. per annum—is not beyond the means of an artizan, and the better wage, which a trained girl of 16 could earn, would fully compensate for the original outlay. At the same time, few things would contribute so much to greater comfort in houses of our artizans and labourers, and to the proper treatment of their young children, as the establishment of at least one of these schools in every urban district. What I saw for myself at Arnhem convinced me of their practical utility. The school, which was founded about thirty years ago, is under the direct patronage of the Queen-Mother. All its rooms are large, light and well-ventilated. The methods of instruction are as simple as possible, and the work done by the pupils, the great majority of whom belong to the industrial classes, is admirable. Even here, too, in Class II., I heard an excellent object-lesson on plant life, and Mej. Top, the charming

directress, remarked how valuable she found this subject in developing general intelligence. This was abundantly shown by the bright answers of the girls, and their lively interest in the lesson. Practical cookery is taught to Class III. for two hours on Wednesday afternoon; as a rule, the number of pupils in a practice class must not exceed twelve. Instruction is also given in Domestic Economy, the keeping of household accounts, ironing, darning, and renovating old garments as well as in ordinary needlework, dressmaking, and the subjects of the primary school.

The school at Zwolle was only opened in 1899, but Mej. Kleyn, the directress, informed me that the number of pupils has already risen to 135 for the commencement of the new Session this month (October). The cost of the school hitherto has been about 6,000 florins a year, towards which the State contributes 2,000, and the Municipality 1,000 florins. The fees are 25 florins a year for the three years' course; to the poor, however, the evening classes are free, and working girls and women pay 12 cents a lesson. Diplomas are to be awarded at the end of the course for Plain and Fancy Needlework, Nursery Maid's duties, and Cookery or Domestic Service. Laundry-work is also taught.

Housewifery Schools (*Huishoud-scholen*).—The first Housewifery School or School of Domestic Science was opened at Amsterdam, and Mej. Meyboom speaks with warm appreciation of the great help and information, which she has from time to time received from the London School Board, on matters of organization. It was started by means of a private guarantee of 3,000 florins for three years, and a small profit of 300 florins was the result of the first year's work. Since then it has prospered continuously, and now stands at the head of all similar institutions in the Netherlands. It is under State supervision, but receives no State aid, nor does the State grant any certificates or diplomas. As many as 800 pupils annually pass through the various classes, which embrace every branch of Domestic Science, and Mej. Meyboom tells me that two hundred, for whom there is no available room, are at present waiting for admission. Soldiers and sailors attend the cookery lessons, and the Mail Boats also send their cooks for instruction. It may be of interest to know that the school is open for inspection by the public on Wednesdays from 2 to 4 p.m. The following is a list of the Courses, with their regulations, and the number of pupils in 1900:—

I. Household Management:—A course of two years for young women of 18 years of age, wishing to become housekeepers. They must be of good health, and have received advanced primary instruction. Fees, for boarders, 650; for day pupils, 300 florins per annum. Hours, 9 a.m. to 12.30 p.m., and from 2 to 4.30 p.m. daily, except during the vacations. The school year begins on the first Friday in September. Number of boarders, 24; day-pupils, 19. Fifteen of the second year pupils obtained the school diploma of "Housekeeper."

II. Instruction for Teachers of Domestic Economy :—All pupils for this course of one year or more must possess the above diploma. Fees, 150 florins. Practical instruction 9 hours, and lessons in Hygiene, Domestic Economy, and kindred subjects 5 hours a week. Four pupils, all of whom gained the school's diploma in this branch.

III. Instruction for Teachers of Cookery :—For this course of one year or more, pupils must have attended Course I. for a year. Fees, 150 florins. Practical instruction 9 hours, and lessons on food and kindred subjects 5 hours a week. Eight pupils, of whom six obtained the school's diploma. All those who obtained any of the above diplomas at once secured situations.

IV. Cookery Course for Ladies :—Fourteen pupils per class. Hours from 9.30 a.m. to 12 p.m., twice a week for 12 weeks, and from 4 to 5 p.m., once a week, on the chemistry of food. Fees, 50 florins. Number of pupils, 112.

V. Cookery Course for Primary School Teachers :—Twelve pupils per course. Hours, 7.30 to 10 a.m., once a week for four months. Fees, 16 florins. Number of pupils, 12. At the unanimous request of the pupils the course was extended to five months.

VI. Cookery Course for Nurses :—Twelve pupils per course. Hours from 2.30 to 4.30 p.m. once a week. Fees, 4 florins a month for nurses: 6 florins for others. Number of pupils, 16.

VII. Course in High Class Cooking :—Eight pupils per course. Fees 10 florins for four lessons. Number of pupils, 9.

VIII. Cookery Course for Servants :—Twelve pupils per course. Hours from 7.30 to 10 a.m. twice a week. Fees, for class (a) beginners, and class (b) plain-cooking 2 florins a month: for class (c) high-class cooking 3 florins a month. Number of lessons, 20. Number of pupils, classes (a & b) 58, class (c) 37.

IX. Cookery Courses for Cooks in the Army, Navy and Merchant Service :—Twelve pupils per course. Hours, 9.30 a.m. to 12 p.m., twice a week for four months. Fees, 50 florins. Number of pupils, 13 from the Army, 10 from the Navy, 1 from the Mail Boats, and 2 private people. All of them obtained certificates.

X. Housewifery Course for Ladies :—Twelve pupils per course. Hours, 2.30 to 4.30 p.m., twice a week for four months. Fees, 35 florins. Number of pupils, 19.

XI. Course in Washing for Ladies :—Ten pupils per course. Hours, 10 a.m. to 12 p.m., once a week. Fees, 6 florins a month. Number of pupils, 17.

XII. Course in Ironing for Ladies:—Twenty pupils per course. Hours, 2.30 to 4.30 p.m. twice a week. Fees, 10 florins a month. Number of pupils, 38.

XIII. Course of Ironing for Servants:—Twelve pupils per course. Hours, 7.30 to 9.30 p.m., once a week. Fees, 2 florins a month. Number of pupils, 47. By request, a special course was arranged for five nursery-maids in the washing and ironing of children's clothes; and five teachers had a course in ironing.

XIV. Course for Children:—Pupils must be 13 years of age. The course lasts two years, and comprises cookery, laundry work, elementary hygiene, and care of the sick. Hours, 2 to 4 p.m. once a week. Fees, 50 cents a month. Twelve pupils per class. Number of pupils, 96.

XV. Course in Renovating Garments (for Ladies):—Fifteen pupils per course. Hours, 10 a.m. to 12 p.m., three times a week for four months. Fees, 25 florins. Number of pupils, 12.

XVI. Course in Dressmaking:—Twelve pupils per course. Hours, 10 a.m. to 12 p.m., three times a week for four months. Fees, 35 florins. Number of pupils, 2.

XVII. Course in First Aid and Sick Nursing:—Hours, 8 to 9 p.m., once a week for 10 months. Fees, 15 florins. Number of pupils, 2.

XVIII. Course in the Chemistry of Food:—This course is obligatory for pupils in Courses II. and III. Hours, 2 to 3 p.m., once a week for ten months. Fees, 15 florins. Number of pupils, 5, exclusive of those in Courses II. and III.

XIX. Course of Instruction for Servants:—Pupils must be 13 years of age. The course lasts one year, and comprises cooking, washing, ironing, dressmaking, renovating, household duties, and elementary hygiene. Hours, 9 a.m. to 4.30 p.m. daily. Fees, one florin per month. Number of pupils, 41. Certificates are granted at the end of the course.

XX. Course for Wardrobe Maids:—Pupils must be 16 years of age. Course of one year. Hours, 9 a.m. to 12 p.m., or 2.30 to 4.30 p.m. daily. Fees, 1 florin a month. Number of pupils, 32. Certificates are granted.

XXI. Course in Dressmaking (for Servants):—Pupils must be 16 years of age. Course of one year. Two hours' instruction three times a month. Fees, 1 florin a month. Number of pupils, 39.

XXII. Course in Table Decoration and Waiting (for Servants):— Pupils must be 16 years of age. Hours, 2 to 4 p.m., once a week. Fees, 50 cents for four lessons. Number of pupils, 32.

Thirteen students from the School for Social Work also had a course in Plain Cooking.

The staff consists of 15 teachers, including the Doctors of Medicine and Science, who take those subjects.

Eight other Schools of Domestic Science have been established at Nijmegen, Arnhem, Utrecht, Alkmaar, Groningen, the Hague, Zwolle, and Schiedam. The one at Utrecht, hitherto supported by a Municipal grant, private subscriptions, fees, and the sale of food, has just been recognised as an Industrial School for Girls, after a slight modification of the curriculum, and will in future receive a subsidy from both the State and the Province. Its organization differs somewhat from that of the Amsterdam school. One department consists of an Artizans' Housewifery School (*Volks-Huishoudschool*), with a course of two years, open to school girls of 14 years of age, who have passed satisfactorily through a primary school. The fees are 25 cents a week. The instruction, which is now being followed by 69 pupils, provides a thorough training for future domestic servants. Some of the girls live on the school premises, and are employed in the ordinary work of the house. The Board of Management assists the pupils to obtain good situations on leaving. There is no difficulty about this, and many of the girls are engaged before the completion of the course. The other department comprises various classes, similar to those at Amsterdam, at which 176 pupils are now in attendance. Mej. Westendorp, the directress, considers it a most hopeful sign that so many ladies become pupils, and that instruction of this kind is more and more regarded as an essential element in the education of every woman.

Schools for cookery alone are in operation at Haarlem, Rotterdam, Zutphen, Leeuwarden, and the Hague; at the last-named, some instruction in household management is also given.

Independent classes in domestic economy subjects are organized by the Society for the Promotion of the General Good (*Maatschappij tot Nut van 't Algemeen*) and other Societies, as well as by the different committees devoted to what in the Netherlands is comprehensively known as "Toynbee-work." *

In March, 1900, an Association of Teachers of Domestic Economy was formed by influential ladies for the improvement of the instruction in that science. The Queen has signified her cordial approval of the movement and most of the schools or societies engaged in the work are represented in the

* No better instance of the extent of the influence and teaching of the late Arnold Toynbee could be given than that the Dutch should thus simply describe almost every effort for the amelioration of the condition of the working-classes as work associated with his name.

association, which now numbers 60 members. It aims at securing greater uniformity in the training of teachers, and at raising the standard of their examinations. In the Report, just issued, great emphasis is laid upon the importance of bringing the education of girls in primary schools into closer correspondence with the practical side of life by lessons in cookery and household subjects. To promote this, and to ensure an adequate supply of properly-qualified teachers, is one of the main objects of the Association.

School for Social Work (*Opleidings-Inrichting voor Socialen Arbeid*).—This interesting institution at "Ons Huis," in Amsterdam, was founded two years ago. In view of the increasing sense of social responsibility, and the desire of so many, especially ladies, to engage actively in work amongst the poor, it was felt that opportunities for the systematic study, both in theory and practice, of social and economic problems ought to be provided. By these means alone can the mistakes and disillusionment, that follow from well-meaning but uninstructed efforts, be avoided. Zeal, unaccompanied by knowledge, often creates two evils for one it seeks to cure. At the same time, the school trains those who are in need of paid employment in connection with charity organization and similar societies. The full course of instruction, from September 15th to July 1st, is for two years, and is only open to students of at least twenty-three years of age. The fees are 150 florins a year. Men are admitted as well as women, and the first male student was enrolled last month. The lectures upon the laws affecting the daily life of the people, and upon the various branches of political, industrial, and social economy are given by the best professors in Amsterdam. The practical work amongst the poor is done under the guidance of experienced leaders. There has been some little difficulty, Meij Boissevain, the directress, tells me, in providing for instruction in the case of orphans and neglected children. The State Reformatory for Girls has alone as yet opened its doors to the students. Otherwise, the results are very satisfactory. Of the fourteen original students, two have remained for a third year; some have returned to the voluntary work which they had previously undertaken; one has been appointed Secretary to the National Society for Promoting Women's Work; another has become Administrator of the Society for Improving the Care of the Poor at Utrecht, and I heard from Mevr. Muller that she had given every satisfaction; and a third is Rent Collector for Workmen's Dwellings on Miss Octavia Hill's method.* Such a school

* "One can see any day excellent buildings execrably managed, and one may see tumble-down old places of wretched construction both healthier and far more home-like because well managed. And I may confidently say that the distinctive feature of our work has been that of devoting our full strength to management. It will be realized at once how much more this implies than mere 'rent-collecting.' An ordinary clerk will go from door to door for rents, that is a very different matter from managing houses. We have tried, as far as possible, to enlist ladies, who would have an idea of how, by diligent attention to all business that devolves on a landlord, by wise rule with regard to all duties which a tenant should fulfil, by

as this may do much to dispel the mischievous idea that any one can lightly embark in social work, and that experience, skilled training, and accurate knowledge are not needed.

The Industrial and Commercial school at Enschedé (*Nederlandsche School voor Nijverheid en Handel*).—This, the chief industrial school in the Netherlands, was founded by the Municipality of Enschedé in 1886, and enjoys an annual subsidy from the State of 19,000 florins. The number of pupils has risen from 96 in 1898 to 126 this year, and is still increasing. The fees range from 60 to 150 florins. The principal buildings comprise a house for the director, a large hall for the exhibition of various textile fabrics, and also of goods manufactured by the pupils, a room for the analysis of clothing materials, a spinning shed, hand and steam loom weaving sheds, a dyeing house, chemical laboratory, and gymnasium. The school consists of three divisions. Division A is a secondary school, which includes what is taught during the first three years of a Higher Burgher School with a five years' course. The pupils of this division, who pass the final examination, are entitled to continue their studies at a State Higher Burgher School without further examination. Three or four pupils a year do so. The others, on an average twenty-six, move on into divisions B or C. Division B is a commercial school with a course of one year, which, in the opinion of Dr. Borgman, the Director, might with advantage be extended to two years. Division C is a technical school. Cotton being the staple industry of the district, the instruction bears mainly upon its manufacture. In the first year the pupils are confined to English, French, German, mathematics, book-keeping, chemistry, physics and commercial law. In the second and third years the instruction becomes more practical and technical, depending for its exact character upon the particular line of business which the pupil intends to pursue. Public courses of instruction are also arranged: these are largely attended by parents, influential residents, and officials. Connected with the establishment there is a very flourishing evening trade school (*Ambachts-avondschool*) with six classes and 275 pupils. These are divided into four groups:—group 1 has a course of three years in commercial subjects; groups 2 and 3, one of four years in different trades and textile manufactures; group 4 has special courses of varying lengths in horticulture, agriculture, etc. The fees are four florins a year for residents, and twenty for strangers.

Every year four or five officers (lieutenants or captains), who are preparing for the "intendance" department of the army, are sent from the Higher Military College at the expense of the Government to study at Enschedé for a period of three months. They thus acquire a very serviceable knowledge of the quality

sympathetic and just decisions with a view to the common good, a high standard of management could be attained." (Miss Octavia Hill in "Occasional Paper No. 7," new series, p. 2. Charity Organization Society, London.)

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of different materials, and all that relates to the clothing of soldiers. The scheme of studies, as approved by the Major-General Inspector of Military Instruction at the Hague in March, 1901, gives a fair idea of the general nature of the curriculum at Enschedé. On that account, and since there is nothing exactly corresponding to it in the training of English officers, it may be of interest to append it.

COURSE FROM APRIL 1 TO JUNE 30, 1901.

Day.	Hours.	Subject.
Monday.	9-12	Practical experiments performed independently. Visits to Manufactories.
	2-4	Practical experiments in bleaching, dyeing, &c., of vegetable materials. Examination of dyes on vegetable fibrines.
	4.15-5.15	Theory of weaving. The Looms. Knowledge of stuffs, &c.
Tuesday.	8-9	Spinning and spinning machinery.
	9-11	Examination of prepared cottons, wools, and dyed tissues.
	11-12	Chemical Technology of the dyeing and bleaching of vegetable materials (cotton, linen, &c.).
	2-4	General investigation (with the microscope) of woollens, mixture of refuse products, length of fibre, quality, composition, strength dynamometry, &c.
Wednesday.	8-9	Theory of mechanical and chemical preparation of waterproof tissues.
	9-10	Spinning and spinning machinery.
	11-12	Practical hand and steam weaving, &c.
	2-4	Chemical Technology of the bleaching and weaving of wool and silk.
Thursday.	8-10	Practical hand and steam weaving.
	10-11	Theory of the mechanical and chemical preparation of waterproof tissues.
	2-4	Practical experiments as to the acid, alkaline or luminous properties of dyes upon vegetable fibrines.
	4-5	Knowledge of fibres for spinning
Friday.	8-10	Practical experiments in dyeing of wool and silk.
	10-12	Analysis of various materials.
	2-5	Practical experiments of various kinds, carried out independently. Visits to Manufactories.
Saturday.	8-11	Analysis of various materials, and preparation of a 'material' book.
	11-12	Chemical Technology of the bleaching and dyeing of vegetable materials (cotton, linen, &c.).
	2-5	Practical experiments of various kinds, carried out independently. Visits to Manufactories.

The Polytechnic (*Polytechnische School*).—This magnificent institution at Delft was founded in 1864 in pursuance of article 39 of the Law of the previous year to provide advanced technical instruction for Civil, Mechanical and Mining Engineers, Architects and Naval Constructors. It is wholly maintained by the State at an expenditure for 1898 of 319,680 florins (£26,640). Its affairs are administered by a Director, appointed by the Crown, and a Council, of which the Director is *ex-officio* President, selected from amongst the Professors. The Staff consists of the Director, 23 Professors, and 49 Assistant Teachers. Fees remain as originally fixed by the above Act. For the full course of four years students pay 200 florins per annum; for one or more subjects the fees are 10, 20, 30, or 40 florins, according to the number of classes per week. The cost of living in Delft for students from a distance is about 1,200 florins yearly. There are seven bursaries, the highest worth 800 florins a year. Since the opening of the school, the number of students has steadily increased from below 100 up to 800 in 1901. These now include ten ladies, studying art, sculpture, and chemistry. The degree of "Engineer" in each of the Faculties is conferred at the end of the course after two examinations, conducted by a special commission appointed by the Minister of the Interior.* Candidates must have previously passed the final examination of the *Hoogere Burger School* with a five years' course. Seventy-five degrees were awarded in 1898. Mr. Telders, the Director, informed me that the demand for "Engineers" is greater than the supply; within six months after leaving the school every one is certain of good employment. The original buildings are situated in Old Delft; no expense has been spared in furnishing them with the latest scientific and technical appliances. One of the most interesting is a Museum with models illustrating the very varied construction of dykes, canals, and polders in the Netherlands, and the curious bridges, etc., of the Dutch Indies. Beyond the Rotterdam gate two handsome new buildings have recently been erected, one a Bacteriological Laboratory, and the other a superbly-equipped Geodetic Observatory for instruction in measuring large areas of the earth's surface, determining its conformation, and the varieties of the intensity of gravity in different regions.

Schools of Commerce (*Handelsscholen*).—Schools devoted to Commercial subjects are in operation at the Hague, Groningen, Rotterdam, and Amsterdam, each with a two years' course, whilst another is to be opened at Arnhem. At Hilversum the municipal school—the Augusta Institution—provides commercial instruction for two years for pupils in the fourth class. At Delft and Schiedam two public primary schools have advanced courses for future clerks. Various private associations have also established schools, and the "Alliance Nationale des employés de commerce et de bureaux" annually organizes classes in 19 of the largest

* Law of 1863, Arts. 58 and foll.

towns. Similar work is done by the Association of Accountants. There does not appear to be any school corresponding to the business colleges of Antwerp, Tokyo, and the United States.

The public commercial school at Amsterdam, referred to above, was opened in 1869, and is attached to the Third Higher Burgher School with a three years' course. It has now 170 pupils, who, if living at Amsterdam, pay from £8 6s. 8d to £20 16s. 8d. per annum, according to the respective incomes of their parents; the fees for outside pupils are in each case £20 16s. 8d. per annum. The school is wholly maintained by the Municipality and the fees of the pupils. Last year's balance-sheet was as follows:—

Expenditure.		Income.	
	Florins.		Florins.
Salaries of teachers -	68,692·17	School fees, etc. -	50,301·39
Salary of concierge -	500	Municipal grant -	24,157·32½
School-apparatus, etc. -	1,319·89		
Lighting and warming -	1,213·80½		
Cleaning . . . -	663·17½		
Repair of school furniture	591,93½		
Repair of buildings -	660·98		
Miscellaneous expenses -	816·76		
Total	74,458·71½	Total	74,458·71½

The cost of the school to the municipality amounted, therefore, in 1900, to £2,013 2s. 3½d. From the very interesting history of the school, compiled by Dr. J. H. H. Hülsmann, the Director, in 1899, and from its instructive diagrams, it appears that the number of pupils has steadily increased from the very commencement. The object throughout has been to provide that technical training which is as essential for the distributor as it is for the producer, and which can only be made effective when based upon a sound general education. Liberal Education upon exclusively modern lines up to the age of 16 or 17 years is the necessary antecedent to successful specialization in commercial subjects, and the superiority of the foreign merchant or clerk in the conduct of business is due less to his technical training, than to the extension and thorough foundation of knowledge, acquired in the *Realschule* or the *Hoogere Burger Scholen*. Dr. Hülsmann assured me that the confidence of the commercial classes had been completely won, and that he had experienced none of the difficulty which the High Commercial School, at Leipzig, has been recently said to have encountered. The best evidence of this is to be found in the future careers of the pupils, and the excellent positions

obtained by them, of which a careful record is kept. Subjoined is the weekly programme of studies for 1901-1902:—

Subjects.	Class I.	Class II.	Total
	No. of hours.	No. of hours.	
Mother-tongue	3	3	6
French	5	4	9
German	4	5	9
English	4	4	8
Commercial Geography	2	2	4
Commercial History	2	1	3
Commercial Arithmetic	3	3	6
Knowledge of Wares and Commercial Chemistry	3	3	6
Political Economy	2	2	4
Commercial Law	—	2	2
Book-keeping	3	2	5
Caligraphy	1	1	2
Totals	32	32	64

Shorthand, Malay and Chinese are amongst the optional subjects.

Navigation Schools (*Zeevaartscholen*).—There are altogether eleven of these schools, and three schools for fishery, with 63 teachers and 590 pupils in 1899. Two of them are at Amsterdam, one of which dates from 1785; the others are at Scheveningen, the Helder, Harlingen, Groningen, Delfzijl, and on the islands of Schiemonnikoog, Terschelling, and Vlieland. With the exception of the original school at Amsterdam, they are supported by State, Provincial and Municipal subsidies, and by private donations. In 1898, the State-aid amounted to 38,450 florins. At Scheveningen, the instruction is free; elsewhere, pupils pay from 25 to 50 florins a year for the full course of two years, and usually 4 florins a month for the special classes. Examinations for masters' and mates' certificates, similar to those of the Board of Trade, are held ten times a year alternately at Amsterdam and Rotterdam by a Commission appointed by the Ministry of Waterways, Trade and Commerce. Candidates must be 18 years of age, and in addition to the technical subjects are examined in English, French and German.* Until this year, the examinations for masters and mates were not obligatory. They have now become so. A certificate as first mate gives the right to serve as master.

The school at Rotterdam is next to the Seaman's Home in the Westerhaven, and Mr. E. J. Hoos, the Director, would always be happy to show it. Lads must not be less than 14, or

* Royal Decree, June 17, 1891.

more than 17 years of age on entering, and they have to pass an examination. The practical instruction during the first year is given chiefly by an old boatswain. The garden has a rigged mast with yards and sails, and a boat for rowing, etc. Later, the instruction is given by a former captain in the Merchant Service. The classes in steam-engineering and the construction of ships, etc., are taken by a retired naval officer, who was at one time Instructor at the Royal Naval Institute at Willemsoord (the Helder). An ample supply of good models and drawings has been provided, and there is an engine from one of the demolished torpedo boats. The school is the property of the Municipality, and has a State subsidy of 6,000 florins. Pupils have free access to the engine and ship-building wharves, the dry docks, and on board the Mail Steamers. From time to time they are taught how to handle engines on boats going down to the Hook. The number of pupils in the two years' course is 14, and of those in the special classes 99, the average attendance of the latter being about 33 a month.

AGRICULTURAL EDUCATION.

(Landbouw Onderwijs.)

Matters relating to agriculture properly fall within the sphere of Reports issued by the Board of Agriculture. Still it may, perhaps, be permissible to refer shortly to a few of the main features of the Dutch System, especially in what concerns instruction for lads. In no country is the provision for agricultural education more elaborate, or its organization more complete than in the Netherlands to-day. This is largely due to the inspiration and ceaseless energy of Dr. Sickesz, late Director-General of Agriculture, who, it is hoped, will eventually become President of a distinct department of agriculture. At present, all agricultural affairs are administered by one of the divisions of the Ministry of the Interior. To assist the Ministry, a central Council of Agriculture, composed of representatives elected by the various Agricultural Societies, meets periodically at the Hague. Practically, nothing is done without the advice of this Council. Each of the Eleven Provinces has a State Professor of Agriculture, whose duties are to inspect and direct the five State experiment stations (*proefvelden*), give lectures, provide instruction for primary school teachers, who wish to obtain an agricultural certificate, and inspect winter agricultural classes in receipt of a State subsidy. In the six provinces with permanent State Winter Agricultural Schools, the Professor is Director of the school. Four of the provinces have State Professors of Horticulture as well, whose duties are *mutatis mutandis* the same. Five State Agronomic Stations have been established for the purpose of analysing manures and food-stuffs, and testing seeds; the one at Hoorn, which is the centre of the dairying industry, is provided with a bacteriological

laboratory. Dr. Sickesz courteously furnished me with the following details of the State expenditure for this year:—

	FLORINS.
Director of Agricultural Education :—	
Salary	3,500
Travelling expenses, etc.	1,100
Agricultural College at Wageningen :—	
Salaries	108,100
Maintenance	83,771
Subsidies granted to voluntary associations for courses and lectures on agriculture, horticulture, forestry, dairying, etc.	91,722
Winter schools	39,200
Teachers of Agriculture and Horticulture appointed by the State :—	
Salaries	38,500
Travelling expenses, etc.	22,075
Training of primary school teachers	8,500
Veterinary College at Utrecht :—	
Salaries	54,500
Maintenance	36,700
Subsidies for courses on farriery	3,600
Total	491,288

This sum of £40,939, compares very favourably with the £8,000 placed at the disposal of the English Board of Agriculture for educational purposes.

At the head of the agricultural education stands the College at Wageningen, an institution conducted throughout in the most workman-like manner, and justly enjoying a world-wide reputation. The long day which I spent there under the guidance of Mr. Broekema, the Director, was too short for anything beyond a very cursory investigation. It comprises four schools or sections: (1) a *Hoogere Burger School*, with a course of four years for boys up to the age of seventeen or eighteen years. Those who obtain the final certificate proceed to the Higher Agricultural School. The curriculum includes mathematics, mechanics, physics, chemistry, botany, biology, geology, drawing, book-keeping, and modern languages, thus providing an admirable foundation for advanced agricultural instruction; (2) The Intermediate Agricultural School, with a course of two years for pupils of seventeen and upwards. Attached to this is a preparatory class of one year, which is a continuation of primary school subjects, and leads into either the agricultural or horticultural schools. Admission into these schools, however, is not dependent upon attendance at the preparatory class, which is really for those whose previous education is deficient. Many of the pupils from the Agricultural School go to the Dutch Indies, and for them there is a third year in colonial agriculture; (3) The Horticultural School, with a two years' course for practical gardeners, and an additional course of the same length for those who desire more scientific instruction;

(4) The Higher School of Agriculture and Forestry, which is divided into two sections, one for home and the other for colonial agriculture. In each of the first three, instruction is given in English, French, and German. The fees are 40 florins, and the total cost for tuition, board and lodging, amounts to about 600 florins per annum. The present number of pupils is 275, including two or three ladies in the horticultural school. In regard to the agricultural students the Director made the usual complaint that there are not as many sons of farmers as there ought to be. The system of short courses has not yet been tried, and the ample provision of agricultural education locally perhaps renders it unnecessary. In horticulture, for which there is an excellent garden of some six acres with a considerable quantity of glass, the students rightly do more practical work than in agriculture. Upon this point, it was instructive to learn from Mr. Broekema that the attempt to combine the teaching of the science and the practice of farming had completely failed at the old college at Groningen, which was consequently closed in 1870. At Wageningen, there are extensive experiment and demonstration plots, but the small farm of 25 acres is mainly used to illustrate the class lessons.

Officers preparing for the "Intendance" service, who go to Enschedé for the training described on page 53, have a previous course of six months' instruction at Wageningen. They are selected by competitive examination, and the Government defrays all their expenses. The instruction, as laid down by the Ministers of War and of the Colonies in 1891, must include botany, husbandry, zoology, the breeding and care of animals, the composition and properties of milk, the principles of productive agriculture, rural economy, and the chemical examination of human and animal food. This system was inaugurated in 1889. On the occasion of my visit there were three such officers at the college.

Winter Schools of Agriculture and Horticulture. — These permanent schools, which are quite distinct from the very numerous winter classes, are intended for the sons of farmers and market-gardeners. The State bears all the expense, and the commune has merely to provide suitable buildings. They are open from October to March, and the full course lasts two years. Pupils are admitted at the age of 16, after an examination in primary school subjects, and must possess some practical knowledge of farming or gardening. The fees may not exceed 20 florins a session,* and are usually 10: in the case of the poor they are remitted. Attached to each of the agricultural schools are professors of chemistry and physics, and, as at the experiment stations in the United States, a veterinary surgeon, whose services are available for the neighbourhood. Groningen, Goes, Sittard, Schagen, Dordrecht, and Leeuwarden have agricultural schools. A glance at the map will show how judiciously they have been distributed to meet very varying agricultural conditions and industries. They certainly afford the most effectual

* Royal Decree, Oct. 21, 1896, sec. 23.

means of bringing the best instruction to the doors of the people, and are on that account preferable to any system of short courses at collegiate centres. Even during the winter, those engaged in the cultivation of the soil have many duties to perform, which render it difficult to be absent from home. The instruction in agriculture is theoretical, but there are frequent excursions, and each school has a small demonstration plot and botanical garden. First-rate apparatus, diagrams, and the expensive papier-mâché models are liberally supplied. At the end of the first session there is an examination, and those only who are likely to profit by further instruction are allowed to remain for a second year. Diplomas are granted at the end of the course. The schools usually meet five days a week from 2 to 6 in the afternoon. Subject to their being qualified in other respects, pupils may be of any age above 16. Appended is the scheme of studies at the agricultural school at Groningen :—

Subjects	No. of hours per week.	
	Class I.	Class II.
Nature of the soil, and tillage . . .	2	2
Manuring	2	2
The raising of crops	2	2
Animal physiology	3	2
The breeding of animals	—	2
The care of animals	2	1
Hygiene	—	2
Dairying	1	2
Rural economy	—	2
Farm accounts	—	1
Chemistry	3	2
Physics	2	1
Botany	2	1
Zoology	2	2
The Dutch language	2	—
Arithmetic	2	1
Total No. of hours.	25	25

Horticultural schools have been established at Naaldwijk, Aalsmeer, Tiel, and Boskoop. Their organisation is similar to that of the agricultural schools. The instruction is rather more practical, and each school has a large experiment plot, provided by some private society. For the experimental work, the State makes a special grant of 1,500 florins per annum. Generally, the pupils have lessons in French, English, and German, commercial correspondence, and commercial geography, subjects

of great importance in view of the large export trade in fruit, flowers, and vegetables. Dr. Löhnis very kindly drove me to see the school at Naaldwijk, about six miles from the Hague, in the Westland. This fertile district is the centre of a most flourishing horticultural industry. Within the immediate neighbourhood of the village no less than a thousand market gardeners are engaged in profitable trade. The equipment of the school is complete, and would put to shame many of our more pretentious institutions. Its annual subsidy from the State is 2,000 florins, exclusive of the Director's salary. The garden, in which some of those who attend the winter school were at work, covers an area of $5\frac{1}{2}$ acres, and is the property of a Co-operative Gardeners' Association. This Association, with a membership of 300, and a capital of 30,000 florins, recently purchased the land for 13,000 florins. Two skilled gardeners, who have all vegetables free, and salaries of 700 and 850 florins respectively, and two labourers with salaries of 400 florins a year each, are employed. The Westland is noted for its grapes, and the extent of the operations may be judged from the fact that in the large new vinery alone there are 62 varieties of them. Seven hundred different kinds of peaches, apricots, pears, and apples are cultivated. In the potato plots some interesting experiments were being made with kainit and other chemical manures, but it was too early to form any opinion about them. During the summer, Mr. K. Wiersma, the Director, is at hand to advise the gardeners of the district, and to him is due the present popularity of the school. For two years after its establishment in 1896, it met with considerable opposition, but Mr. Wiersma, who was appointed in 1898, succeeded in overcoming this prejudice. The appearance of the garden is the best evidence of his skill as a teacher, and from the proprietors of two large private gardens, which I also visited, I heard nothing but praise of the school. To dispose of the produce of the neighbourhood, without the trouble and expense of finding a market, sales by auction are held in the village market-hall five times a week in summer and three in winter. Nowhere have I seen a more successful combination of State aid and local enterprise than at Naaldwijk, or greater benefit from voluntary co-operation. The export trade in fruit alone to England increases annually in value, but there is no reason why with a little organisation it should not be supplanted by our own fruit-growing counties. It is not due to better climatic conditions.

The Colony of the Société de Bienfaisance.—No survey of education in the Netherlands would be complete without some mention of the great work of this Society. Many descriptions of it have been written, and here we are concerned solely with its educational methods. These methods have enabled it since its foundation in the famine of 1816, to do more than any Society towards solving the problem of dealing with the unemployed. From almost every town a committee sends some of those, who would otherwise be paupers or criminals. For these Colonists, who number 2,000, every form of practical instruction

is provided, and their future status in the colony depends upon themselves. For the children, there are five public primary schools; boys on leaving them must attend a continuation class for two years, and girls a sewing or needlework class until their sixteenth year. The lads are then trained for various trades, the railway, post or telegraph services, the Army—(there is a flourishing Lads' Brigade)—or the Navy, as farmers, or gardeners. Intermediate schools of horticulture, forestry, and agriculture have been established, each of which has an annual subsidy of 2,500 florins from the State. The horticultural school, which is attended by lads of 15 for three years, has an extensive and well-kept garden of 12 acres, cultivated entirely by the pupils. Many of their drawings and paintings of flowers are admirably done. The school is not confined to the sons of Colonists, and it is pleasant to know that no ill-feeling exists between the children of independent parents and the others. The school of forestry, with a course of two years, has a large nursery, and about 60 acres for clearing. Theoretical instruction is given at the agricultural school during two winters, and practical work is done on one of the Society's farms in the summer. There is also instruction in dairying. The Colony is not self-supporting, but depends upon subscriptions and legacies. These amounted to 33,409 florins in 1899. Religion is the basis of the whole institution, but it is entirely free from any spirit of Sectarianism. One Catholic and two Protestant churches have been erected. No estimate of the work can be formed without a personal visit. For miles and miles one traverses land reclaimed and brought under cultivation as effectually as that of La Sologne in France.

STATE AND OTHER EXPENDITURE UPON EDUCATION.

The annexed statement of the total expenditure by the State, the Provinces, and the Communes upon all branches of education, and the income arising therefrom, for the years 1889 and 1899 was courteously supplied to me by Mr. S. J. Blaupot ten Cate, of the Ministry of the Interior:—

EXPENDITURE, 1889.

	State.	Provinces.	Communes.	Total.
	Florins.	Florins.	Florins.	Florins.
Universities -	1,322,830·80½	10,000	323,762·28½	1,656,593·09
Instruction of teachers of religion -	71,348·60			71,348·60
Gymnasias -	2,427,762·22		580,479·59	823,241·81
Intermediate -	1,022,434·06		1,177,931·07½	2,200,365·13½
Drawing, Industrial and Deaf and Dumb Schools -	128,940·26	45,079·59	238,334·33	412,354·18
College for Midwives -	37,800·52			37,800·52
Veterinary School -	86,424·71½			86,424·71½
Primary -	4,388,647·90½		8,199,794·09	12,588,441·99½
Total -	7,301,189·08½	55,079·59	10,520,301·37	17,876,570·64½

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Since 1878 the Provinces are forbidden by Art 3 of the Law on Primary Education to expend money upon primary schools.

The expenditure upon agricultural education is included under the head of intermediate education.

From the above statistics it appears that the total outlay amounted in 1889, to 17,876,570·64½ florins (£1,489,714 15s. 5d.)

INCOME, 1899.

	State.	Communes.	Total.
Universities (fees, etc.) - -	226,392·32	117,148·13½	743,540·45½
Gymnasia (mineralize, etc.) - -		212,309·27½	212,309·27½
Intermediate (fees, etc.) - -	93,381·83	286,827·27	380,209·10
Drawing Schools, etc. (fees, etc.)		3,454·40	3,454·40
Veterinary School (fees, etc.) -	23,880·42½		23,880·42½
Primary (fees, etc.) - - -	14,196·30	1,376,574·81	1,390,771·11
Total -	357,850·87½	1,996,313·89	2,354,164·76½

This income of 2,354,164·76½ makes the net outlay amount to 15,522,406·88 florins (£1,293,533 18s. 3½d.)

EXPENDITURE, 1899.

	State.	Provinces.	Communes.	Total.
Universities - -	1,750,094·34½	10,000	349,811·26	2,109,905·60½
Instruction of teachers of religion - -	78,471·24			78,471·24
Gymnasia - -	251,689·98		594,944·53	846,634·51
Intermediate - -	1,496,996·24½		1527,701·54	3,024,697·78½
Drawing, Industrial and Deaf and Dumb Schools -	660,904·76	85,796·22½	356,993·88	1,103,694·86½
College for Mid-wives - - -	159,082·17½			159,082·27½
Veterinary School -	65,220·06			65,220·06
Primary - - -	6,661,369·23			18,480,973·23½
Total -	11,153,828·13½	95,796·22½	14,649,055·21	25,898,679·57½

The gross outlay therefore in 1889 amounted to 25,898,679·57½ florins (£2,158,223 5s. 11½d.), that is to 8,022,109·53 florins (£668,509 2s. 6d.) more than ten years previously.

INCOME, 1899.

	Income.	Communes.	Total.
Universities (fees, etc.) - -	245,034·50	138,196·80	383,141·30
Gymnasias (mineralize, etc.) -		196,807·43	196,807·43
Intermediate (fees, etc.) - -	238,498·25	474,576·83	713,070·08
Drawing School, etc. (fees, etc.) -		7,654·75½	7,654·75½
Veterinary School (fees, etc.) -	20,157·03		20,157·03
Primary (fees, etc.) - - -	49,719·95	1,789,258·81	1,838,973·70
Total -	553,399·73	2,606,404·62½	3,159,804·35½

This shows an increase of income amounting to 815,639·59 florins (£67,969 19s.) above that received in 1889, and makes the total net increase in expenditure, for 1899, 7,216,468·34 florins (£601,372 7s. 7d.).

CONCLUSION.

The above summary indicates the variety and extent of education provided in the Netherlands, and it is far from being a complete record. No system is perfect; there will always be some gaps, and some methods capable of improvement. Nor does it follow that because a system satisfies the needs of one country, it will be equally applicable to those of another. In education, as in other matters, each nation must solve its own problems for itself. Still, lessons which we can ill afford to neglect, may be learnt from the study of Dutch Schools. What those lessons are has been already shown, and it is unnecessary to repeat them here in detail. They may be classified under many different heads:—The bringing of education of every grade under the supervision of the State; the freedom from excessive centralization; the subordination of the interests of the teacher to those of the taught; the inevitable recognition of denominational primary schools; the solution of the difficulty in regard to child-labour in the rural districts; the establishment of secondary schools suited to modern requirements; the training of girls in domestic duties, and the organization of agricultural education. In each of these directions, ways are suggested for ending the profitless and interminable lament over what we daily own we lack. There must be compromise. The good of the whole is superior to that of the parts. Sectional and local interests are not the most important. The secret of what the Dutch have accomplished is to be found in their intense earnestness, their sound sense, their indomitable perseverance, and the universal conviction that education is the greatest boon that a Government has to bestow. The result is that the people have attained to a degree of prosperity and comfort probably unequalled, and certainly not surpassed in any country.

October, 1901.

J. C. M.

April, 1902.

SPECIMEN COURSES IN PRIMARY SCHOOLS.

Every town organizes its own primary schools, and they are frequently divided into different grades. At Utrecht, for instance, they are classified in five different ways. The following are specimen schemes of study:—

Mixed schools with a course of six years of ordinary primary instruction:—

[illegible]

The hours at which the primary schools shall be open are determined by the head teacher, subject to the approval of the Municipal Authority and the District Inspector. The schools are usually open from 9 to 12, and from 2 to 4.

BOYS' SCHOOL WITH ADVANCED PRIMARY INSTRUCTION.

Subject.	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.
Reading - . . .	6	5	5	4	2	2
Writing - . . .	5	5	4½	2½	2	2
Arithmetic - . .	7½	7	7	6	5	5
Mother-tongue -	4	4	4	4	4	4
History - . . .	—	1	1	1	2	2
Geography - . .	—	1	1½	1½	2	2
Nature-Study -	1	1	1	1	1	1
Singing - . . .	1½	1	1	1	1	1
French - . . .	—	—	—	4	6	6
Drawing - . . .	1	1	1	1	1	1
Gymnastics - .	2	2	2	2	2	2
Total hours } per week }	28	28	28	28	28	28

GIRLS' SCHOOL WITH ADVANCED PRIMARY INSTRUCTION.

Subject.	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.
Reading - . . .	6	5	4½	3	3	2
Writing - . . .	4	4	2½	1½	1½	1
Arithmetic - . .	6	6	6	5	5	5
Mother-tongue -	4	4	6	4	3	3
History - . . .	—	—	—	1	1½	2
Geography - . .	—	1	1	1	2	2
Nature-Study -	1	1	1	1	1	1
Singing - . . .	1	1	1	1	1	—
French - . . .	—	—	—	5	5	6
Drawing - . . .	1	1	1	1	1	1
Gymnastics - .	2	2	2	2	2	2
Needlework - .	3	3	3	2½	2	3
Total hours } per week }	28	28	28	28	28	28

APPENDIX B.

SPECIMEN COURSES OF INSTRUCTION IN CONTINUATION SCHOOLS

BOYS' SCHOOL.

FROM SEPTEMBER 1 TO MARCH 31.

Subject.	Class I.	Class IIA.	Class IIB.	Class III.
Reading -	2½	2½	2½	2½
Writing -	¾	¾	¾	¾
Arithmetic -	3½	3½	3½	3½
Mother-tongue -	1½	1½	1½	1½
Drawing -	2	2	2	2
Total hours per week -	10	10	10	10

FROM APRIL 1 TO JULY 30.

Subject.	Class I.	Class IIA.	Class IIB.	Class III.
Reading -	2	2	2	2
Writing -	1	1	1	½
Arithmetic -	2½	2½	2½	2½
Mother-tongue -	1	1	1	1
Drawing -	1½	1½	1½	2
Total hours per week -	8	8	8	8

From September to March the classes are held on Monday, Tuesday, Wednesday, Thursday and Friday, from 7.30 to 9.30 p.m.

From April to July there is no class on Wednesday.

GIRLS' SCHOOL.

Subject.	Class I.	Class II.	Class III.
Reading -	2	2	2
Writing -	1	1	—
Arithmetic -	2	2	2
Mother-Tongue -	2	2	2
Singing -	1	1	1
Needlework -	1	1	2
Drawing -	2	2	2
Total hours per week -	11	11	11

The school is open from April 1st to March 30th, and the classes are held on Mondays from 6 to 9 p.m., and on Tuesday Wednesday, Thursday, and Friday, from 6 to 8 p.m.

MIXED SCHOOL.

Subject.	Class I.		Class II.		Class III.	
	B.	G.	B.	G.	B.	G.
Reading - - -	2½	2½	2½	2	2½	2
Writing - - -	1½	1	1½	1	1	1
Arithmetic - - -	3	3	3	2½	3	2½
Mother-Tongue - -	2	1½	2	1½	1½	1½
Needlework - - -	—	2	—	2	—	2
Drawing - - -	1	—	1	1	2	1
Total hours per week -	10	10	10	10	10	10

The school is open from September 1st to March 31st, and the classes are held every evening from 7.30 to 9.30.

APPENDIX C.

THE INDUSTRIAL SCHOOL FOR GIRLS AT ALKMAAR.

The Industrial School for Girls at Alkmaar is so admirably organized, that it will be well to allow Mevr. M. van Reenen-Völter to describe it in her own words. "The students," she writes, "at our school are of very different positions. We have therefore three courses: one in the evening for children of poor people, girls who are servants part of the day. These girls are taught to become good housewives and good servants. They only pay for the lessons if they can afford to do so. The lessons take place on four or five evenings, for the smaller ones from 5 to 7, and the older ones from 7 to 9 o'clock. They are taught to sew, to mend, to darn, to make their own clothes, cookery, laundry-work and ironing, while we give them notions of

house-sanitation. The second course is for the children of tradesmen, shopkeepers, schoolmasters and other officials who can afford to give some education to their children. This course lasts three years or longer, and has a double aim. In the first place, to form good housewives and mothers; in the second place, to teach the young girls one or more branches of industry, art or science, in order to enable them to earn their own livelihood if they wish or are obliged to do it. The lessons take place every day from 9 to 12.30 and from 2 to 4.30. The course is divided into two parts, each of eighteen months. During the first part, all the pupils receive the same instruction. The lessons are as follows:—*First six months:* Twenty hours a week sewing with the hand, cutting and sewing all the linen necessary for a baby, besides knitting. Six hours' drawing (ornamental). Three and a half hours' cooking, and the chemistry of food. Two hours' laundry-work. One and a half hours' ironing. Two hours' reading, and arithmetic applied to cookery and house-sanitation. *Second six months:* Twenty hours a week sewing by hand all the linen for a young girl, darning, mending and simple embroidery. Six hours' drawing (ornamental and geometrical). Three hours' cooking and chemistry of food. Two hours' laundry-work. One and a half hours' ironing. Two hours' reading and arithmetic applied to the chemistry of food, house-sanitation, etc. *Third six months:* Twenty hours a week sewing with the machine all the linen for grown-up people. Six hours' drawing (ornamental and geometrical). Three hours' cooking, and the chemistry of food. Two hours' laundry-work. One and a half hours' ironing. Two hours' reading and arithmetic, applied as before. During this year and a half those pupils who wish it can have lessons in French, English, and German by a very small extra payment. After they have followed the above course, the pupils choose which branch of industry, art or science they will be taught, and receive their lessons in one or more of the following branches:—

- (1) Literary Subjects and Arithmetic. (2) Drawing. (3) Dress-making. (4) Cooking. (5) Ironing. (6) Chemistry of Food. (7) Dietetics. (8) Home Nursing. (9) Pedagogy. (10) Froebel and Sköjd. (11) Science of Instruction. (12) All Kinds of Embroidery and Art Needlework. (13) Lace-making. (14) Hair-dressing. (15) Book-keeping. (16) Painting on Porcelain and Majolica. (17) Corset-making. (18) Foreign Languages. (19) Gardening.

The professions chosen by the girls are Teachers of Linen-sewing, Art-needlework, Dressmaking, Cookery and Laundry-work, and Drawing, Seamstresses, Dress-makers, Housekeepers, Stitchers of Books, Paintresses in a Porcelain Manufactory, Ladies' Maids, Assistants in the Household, Nursery Governesses, Book-keepers and Cooks. Half the girls study for their own homes alone. We take great care to make all this course as practical as possible, and let the girls have all the instruction necessary for their success in life. The pupils pay £2 a year. They wear a sort of uniform, consisting of a long pinafore with long sleeves of white cotton for sewing, blue for

cooking and laundry-work, and another shade of blue for drawing. Our third course takes place at the same hours as the second; it is followed by young girls of the higher classes, the nobility included. These pupils pay £3, besides all that is required for the lessons. They may choose from the beginning what lessons they will follow. The school gets the following aid:—From the State 5,000 florins, from the Provinces 1,500 florins, and from the Municipality 2,500 florins.”

The five large photographs of the dressmaking, ironing and cookery classes, which Mevr. van Reenen-Völter kindly gave me, give an excellent idea of the systematic way in which the girls are taught. The total number of pupils enrolled on December 31st, 1900, was 399, viz.: 178 in the three years' course, 51 in the special classes, and 170 in the evening school. The attendance at the last-named is considerably higher in summer than in winter. During the year 1900, the total number of pupils was 626—351 in the day and 275 in the evening school. Eighteen of the above 178 pupils pay no fees; the rest pay from 4 to 40 florins a year, according to their means. Their ages range from 12 to 23 years. Forty-seven are the daughters of tradesmen, 49 of shopkeepers, 37 of officials, teachers or soldiers, 2 of photographers, 27 of farmers, 14 of workmen, and 2 of independent people. One hundred and nineteen of the 351 pupils in the day school in 1900 came from other towns or villages. Forty-one of the 77 pupils who completed the three years' course that year obtained good situations, 25 returned to help in their own homes, the health of two broke down, and nine went to distant places.

The following is the balance-sheet for 1900:—

Income.	Florins.	Expenditure.	Florins.
School Fees . . .	4,097·44½	Deficit from 1899 . . .	13·0½
Subscriptions . . .	698·50	Salaries	7,489·34
Prizes for Sewing . . .	150·0	Rent	576
State Subsidy . . .	3,000·0	Servants, &c.	740·81½
Provincial Subsidy . . .	700·0	Repairs, &c.	1,177·17
Communal Subsidy . . .	1,000·0	Material for Classes . . .	1,144·4½
Subsidy from other Communes . . .	140·0	Fire and Light	553·49½
Donations, &c.	1,876·10	Water Rate and Insurance	61·61
Profit from Building Account	84·16½	Printing and Advertising	394·49½
Deficit	569·86	Miscellaneous Expenses	165·68
	f. 12,316·07		f. 12,316·07

APPENDIX C.—continued.

STATISTICS OF EACH OF THE INDUSTRIAL SCHOOLS FOR GIRLS.

Name of School	Statistics for	Duration of Course	No. of Classes	No. of Teachers	No. of Pupils	Fees for the Whole Course	Income from Fees	Average Payment per Pupil	Subsidies	Subscriptions	Salaries	Total Expenditure
Alkmaar	1900	3	6	20*	360	25 fl.	3,360 fl.	17.50 fl.	State 3,000 fl. Province 700 fl. Municipality 1,000 fl. 4,700 fl.	880 fl.	7,275 fl.	15,650 fl.
Den Haag	1899	5	5	14	153	15 fl.	2,545 fl.	16.10 fl.	State 10,500 fl. Province Municipality	1,070 fl.	8,965 fl.	16,804 fl.
Amsterdam	1898-1899	3	3	22	209	25 fl.	2,400 fl.	16.75 fl.	State 4,000 fl. Province 2,000 fl. Municipality 6,000 fl. 12,000 fl.			
Rotterdam	1899-1900	3	6	21	300	20 fl.	6,777 fl.	22.50 fl.	State 4,500 fl. Province 2,000 fl. Municipality 5,000 fl. Profit 1,000 fl. 12,500 fl.	1,735 fl.	14,046 fl.	22,334 fl.
									State 6,000 fl. Province Municipality	2,995 fl.	13,821 fl.	22,504 fl.

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Office of Special Inquiries and Reports,
November, 1903.

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THE SCHOOL TRAINING AND EARLY EMPLOYMENT OF LANCASHIRE CHILDREN.*

It is sometimes said by philosophic critics who belong to no party, that when they survey schemes of Elementary Education prepared by ordinary men, who bear the name of this party or of that, they discover one capital fault ; whatever else has been provided, whatever other interests have been safeguarded, the needs of the children themselves have been forgotten. Such a complaint if it is made with justice, is one of great weight. The omission of the most important factor detracts from the value of a calculation. So much will be generally agreed. But when we leave the ground of an unimpeachable, but perhaps unfertile, theory and ask what the needs of children are, what they can learn, and what they like to learn in school, we are confronted with a very difficult problem. It is hardly more possible to consult children directly on a matter which so nearly touches them than to discuss with horses the best methods of breaking and training ; at any rate if any "educationists" have attempted such a consultation they seem loth to make public what they learnt.

The provision of public elementary education (like that of other branches of education) inevitably falls into the hands of men whose own school-days are long past, men whose proposals are apt to exhibit, with the maturity and balance, other qualities also which are associated with middle-age, and what is of more serious moment, men for the most part who were never themselves pupils in public Elementary Schools, but got their early education in the quite different schools which are attended by the children of the middle or the richer classes.

It may therefore be worth while, especial y at a time like the present, to try for a moment to take the point of view, not indeed of a school-child, but of an ordinary working-class youth of, let us say, between seventeen and twenty years of age, and to enquire what are his recollections of school life, and further to ask how far, and in what way, his schooling was a useful preparation either for the general demands which the life he leads and the society in which he finds himself placed make upon him ; and, more narrowly, for the work at which he earns his living. In attempting to take this point of view we have been helped by the answers given to such questions by a number of boys and young men who are very fairly representative of the class to which they belong, and for the rest have depended upon what we have learnt more indirectly, but with perhaps not less precision, from an acquaintance now of some years' standing which we have enjoyed with a yet larger number of working lads, with

* See in Volume VIII of *Special Reports on Educational Subjects*, No. 22, "Report on the Education, Earnings and Social Condition of Boys engaged in Street-Trading in Manchester," by E. T. Campagnac and C. E. B. Russell.

whom we have been brought into constant relationship. If it is said that a statement based on such grounds must necessarily lack breadth, we shall not try to disprove the charge; but we may perhaps claim that it is by some such method that an enquiry must be conducted, which is (1) to show what after all is the product of our elementary schools, and (2) to discover what the people who have recently gone through these schools think of them. And the second result of such an enquiry is the more needed inasmuch as among all the voices which are heard in discussions upon elementary education, it is precisely the voice of the working class which is heard least often and least distinctly. It may perhaps be objected that the opinion of mere boys (of the age which we have mentioned) cannot be of value; but it should be remembered that such boys, having had a sterner experience of life than is common among the richer age-fellows, are more competent to form a judgment than they. They are not yet far enough away from their school-days for the recollection of them to have faded from their mind, and they have already been sufficiently long engaged in active work, and are sufficiently familiar with the general conditions of the life which they will have to lead in the community, to be able to make a cleaver estimate even though it should be an erroneous estimate of what they owe to the school or schools in which they passed their earlier years. It may well be doubted whether the ordinary working man of middle age would be induced to try to make such an estimate, and if he did it would be of less value to us; for, in the first place, elementary education has suffered many changes since the time at which he would be speaking, his impressions, even if at all accurate, would be largely irrelevant to the issues which are at the present day of importance; and, secondly, he would be far more apt to mix political considerations with any criticism which he might be willing or able to offer.

We have had the advantage of receiving much information, from which we are very grateful, from not a few employers of labour, from managers of schools, and school teachers and others, and for this we gladly make use in the following pages; but our main attempt is to sketch the portrait of an average working-class boy who has left school and been at work for four or five years, and to sketch it in lines which he would himself admit to be true, and for this we have chosen to depend mainly on what he himself says and what he seems to think and to be.

When we ask with what kind of feelings the boys of the working class look back upon their old school, we are brought at once to the face of one of the most striking differences between the lot of such boys and that of those who have been brought up at the great public schools or at many of the grammar and other day schools provided for boys whose schooling is of a different order. For the latter to have a pride in their school, and in its traditions, and to have an affection for the place and the men who taught there, is not, we think, an exceptional thing, but the rule. When

precisely are the elements of which such a pride is made up, and how deep such an affection has struck its roots, may be questions to which diverse and not always gratifying answers would be given. There is often something snobbish in the one, and something less than generous in the other; but there are certainly nobler qualities mixed with both, and it is very far from uncommon for a man who did little credit to his school when he was a pupil, and has added nothing to its reputation in later life, yet to be jealous of its honour, or to hold its prosperity very dear. It is a sufficient proof of this that the mere fact of having been educated at the same school forms a bond of no mean force among men who have nothing else in common, and may be actually separated by distance or by conflicting interests from one another; they meet gladly from time to time as members of an "Old Boys' Club."*

That our great public schools and many others of less fame, though perhaps not less merit, have been a soil out of which a sentiment so strong and so enduring, so humane and so instinct with imagination, should have sprung seems to us to be one of the main reasons for the gratitude which many men feel towards them. It is not easy to exaggerate its value, both for the men who cherish it, and even for the state of which they are members. But if one listens to the conversation of a group of boys of the working class, he will hear very little of their schools; when they have been pupils at the same school there is not a word to revive a common memory, not a story of common interest; if they have been at different schools, there is nothing of the eager rivalry in which other boys contend for the superiority of the school on which they look back if not as the scene of their own great exploits yet as an institution of which they are glad to have formed a part. The sentiment which is so vigorous and so general in the first class of boys is rare in the second.

This is surely a great loss to boys of the working class; how are we to account for it? In the first place, it may of course be urged that as working-class boys leave school so much earlier than the

* A good Evening Continuation Class which draws together boys or girls who were formerly pupils of the Day School in which it is conducted sometimes serves in some measure as a substitute, but clearly it cannot take the place of such a club. Nor can the occasional re-unions of old pupils, held from time to time in some Elementary Schools, be regarded as an equivalent.

The "Old Northeyites," the "Old Rutlanders," and the "Old Dalgleishers" Clubs connected with Toynbee Hall are institutions in which the spirit of which we are speaking is fostered. The object which the founders and managers set before themselves first and foremost is the creation of a school tradition (see the Eighteenth Annual Report of the Universities' Settlement in East London, p. 20).

So far as our observation goes, Industrial Schools seem to be more successful in encouraging this spirit than ordinary day schools. There can be no question that the usefulness, *e.g.*, of the Ardwick Green Industrial School in Manchester is very largely due to the rare wisdom and energy with which a corporate life is built up in the School, the influence of which is one of the most valuable possessions of the boys when they leave its doors.

others, there is hardly time for this school-patriotism to be developed in their minds. A consideration more important, but not adequate to explain the distinction in point, is that inasmuch as this school patriotism is very boyish in its character (often, indeed, very childish), those who are in fact called to play the part of men when they are in years so young cannot be expected to think or speak as children. They have their work to do, and when that is finished there is little opportunity or leisure for cultivating this sentiment, even if it might be imagined to exist.

There is some weight in both these arguments, but we believe the root of the difference is to be found not* in the boys, and not in the conditions of their life after leaving school, but partly and mainly in the nature and work of the schools themselves, and partly also in the point of view from which the parents themselves in the two several cases regard the schools to which they send their children. Obviously an *esprit de corps* springs up more naturally in a boarding school than in a day school, and it is in boarding schools that it has most conspicuously shown itself, though it is of course to be found in many day schools as well. But the children of the working classes are not sent to boarding schools, and if they escape the dangers which are peculiar to them, they miss also the special advantages which they have to offer. But it would be unfair both to day and to boarding schools to maintain that it is to the fact of boarding or living together that the origin and growth of this healthy spirit are due. More than any other agency it is the school games which draw the boys together in friendly antagonism, which teach them something, which they do not forget, of co-operation and subordination, of self-forgetfulness and order, and above all show them that it is for them, by their own prowess, to keep up and exalt the fame of their school against its rivals. Much has of late years been said and written, and not without justice, in condemnation of the evils of athleticism. It is easy for masters and boys alike to think too much of excellence in cricket and in football, and no doubt both have fallen in many cases into this danger. And it is true, moreover, that much that is less than praiseworthy in school *esprit de corps* springs from the exaggerated importance which in some schools may have been allowed to attach to athletics. For our present purpose it is more important to look at the other side of the question, and to remember that the schools to which it is generally supposed to be a good thing for a boy† to be sent are those in

* Cf. Adam Smith (*Wealth of Nations*, Book I. Chap. II.): "The difference between the most dissimilar characters, between a philosopher and a common street porter, for example, seems to arise not so much from nature, as from habit, custom, and education." The whole passage is remarkably relevant to problems of the hour.

† It needs scarcely to be remarked that due attention is at last being paid to athletics in good Girls' Schools, also.

which bodily health is cultivated along with mental vigour, and in which a boy's natural desire for games, and his aptitude for forming associations with his fellows in them, get both recognition and encouragement, and these are due not merely to the belief that games are an excellent means of training the body, but quite as much, if not more, to the conviction which is widely held that they afford an admirable discipline also for the mind, and go far towards building up those qualities which later on will prove themselves to be essential parts of the character of a good citizen—of a man, who knows how both to co-operate and to hold his own with his fellows. In the elementary schools an effort is made in many quarters to encourage games and athletic competitions among the children, and there can be no doubt that it is more generally admitted now than ever before that what is good for the children of the upper and middle classes (as they are rather vaguely called) is also likely to be good for poorer children as well. But it has not yet been found possible to make so much of games in the elementary schools as in others; they are not yet regarded as an essential part of the school training, we had almost said of the curriculum. Teachers, already hard worked, can hardly be expected to add a new province to their wide and growing duties, and it must be added that the external aids (adequate cricket or football grounds, or a gymnasium, or even the bats and balls required) are almost wholly wanting. It is no matter for surprise, therefore, that the regard which a public school boy has for his school should be something quite different from that felt by a pupil in an elementary day school.

We do not, of course, mean to say that the athletics of a public school are really the most important part of the school programme, but that, being an important part of it, they are also that particular part on which a boy will look back with the freshest memory in later life, and which in the course of school days will seem to him to be of primary moment. A boy who leaves the ordinary elementary school carries no such recollections with him.

It might well be imagined that the elementary schools bestow their greatest boon on the children who attend them, in the instruction which they so laboriously and often so skilfully impart; and there are probably many persons who would distinguish between such schools and those intended for the children of richer parents in this way; they would argue that what is strictly necessary, from a commercial point of view, should be taught in the public elementary schools, and that the luxuries of education should be reserved for those who can pay for them; they would maintain, not unreasonably, that it is of first-rate importance that the children of the working classes should learn in school what will help them in the common work to which they will so soon be called. The argument, sound in many respects, breaks down in so far as it assumes, first, that there is some essential difference in character between rich boys and poor boys, corres-

ponding pretty accurately to the outward difference in their lot; and, secondly, that anything which is generous must be placed in the category of mere luxuries, and that anything which is necessary is also meagre.

But on reflection most people will, we think, agree that what a working-class boy carries away from school of most value both to himself and to society is not at all the odd farrago of various kinds of knowledge which he possesses, but something of an entirely different nature. There can be little doubt that the most important benefit which he gained during his school years was the habit, more or less firmly implanted, of regularity, of obedience, the sense of discipline, the knowledge that he was under control. A distinction is continually made, though not always with proper discrimination and weight, between the moral and the intellectual parts of education. It is, no doubt, a distinction of value, and different ideals of education in different societies and countries take their characteristic colour and tendency from the comparative importance which is given to the one or the other of these parts. In England hitherto, and perhaps especially in the great schools to which the sons of the richer classes are sent, the moral elements of education have received a care and won an importance exceeding those which have been granted to the strictly intellectual. It may be doubted whether, consciously at any rate, Englishmen have shown the same sort of preference (a preference which sometimes expresses itself as that of character over knowledge) when they have turned their attention to elementary schools in which the great mass of the poorer children receive their early, and in most cases their only, school training. And yet, in spite of all this, and in spite of the curious inclination which we have in this country to take a commercial view of education when it is the poor who are being treated (for there have, in fact, been two quite different systems, based upon different ideals, the one for the children of the poor, and the other for the children of the well-to-do and the rich), we feel sure, after all, that it is this habit of discipline which is the most valuable and the most real gift which the working boy, when he leaves its doors, carries away with him from his school.

An objection may very well be raised here: it may be said that among the least satisfactory, indeed the most ominous, characteristics of the present generation are a certain lack of balance, a want of reserve, an impatience for success, a failure in reverence and the sense of authority—complaints on these scores are often heard from the lips of men who can speak from wide knowledge and careful investigation, and though their charges are not directed solely against what are called the working classes, it is clear that the working classes are in great measure open to them. There is much to be said on the other side. For our own part we are inclined to give great weight to these and similar indictments, though they may be often exaggerated, and sometimes misdirected: but they are often just and true, and certainly

point out a grave danger which is imminent, if it has not already overtaken us. And it may be said that it is idle to claim as the supreme lesson of the Elementary Schools the lesson of discipline, in the face of evidence so strong which seems to suggest, or even to prove, that it is precisely discipline in need of which—poor, or middle-class, or rich—we all stand. Our answer is two-fold: first, faulty and weak as the sense of discipline inculcated at school may often be, it is yet in the schools more than in any other sphere that such a sense is cultivated; and, secondly, that the failure in this quality is largely due not so much to the weakness of the schools, as to the circumstances wholly hostile to such a sense, in which a boy finds himself when he leaves school, and into which he is thrown, even while still of school age, the moment he goes at the end of the day from the schoolroom door.

We should be most unwilling to depreciate the efforts which working-class parents often make for the proper and wholesome bringing up of their children. Nothing is more admirable than the patient and spirited struggle which many of them make to surround their children with good influences and to train them in habits of order and honour, and we will add, of piety. Only those who have actually lived in a working-class neighbourhood, and seen and felt the difficulties which stand in their way, can at all realise how hard it is for such parents to do as they would for their sons and daughters. We set aside the obvious and, from some points of view, the least important matter of poverty. Poverty in itself is not the main difficulty. The moderation and judgment, the handiness and versatility of a good man, and the thrift and management of a resourceful wife go far towards making up for the troubles which spring from that source; and such parents are indeed able to turn their poverty into one of the most potent and beneficent influences in the training of their children, teaching them self-reliance, patience, a certain detachment from what is grossly material, a happy stoicism, a kind of active idealism, nowhere more magnificently illustrated than in many poor homes. But it must be remembered that people who can so splendidly rise above circumstances are few in any rank; and the great majority are unable to make, or at any rate to continue, without faltering, so strenuous an effort. And for all alike, for the exceptional and for the ordinary folk, the conditions of the battle are such as to make complete success unattainable. The child of middle-class parents has the chance, at least, of learning at home what his poorer age-fellows cannot learn there. He is regularly bathed, and regularly fed; he is regularly exercised and sent to bed at regular hours. But in the homes of the poor, with their meagre accommodation, where fathers and mothers are both wage-earners, as they often are, where the children are necessarily left to their own devices for long hours, where their playground is the street, and their home, such as it is, is not sacred from the intrusion of the curious neighbour and the ubiquitous philanthropist; where

the cares of mature years are discussed, as they must be, in presence of little children, and when the instability of the household inevitably though insensibly affects the confidence of the children—in these conditions, those habits of discipline, which are best fostered by vigilant care, by constant attention, by personal observation on the part of parents, must, of course, be invalidated. The dog who is sure of his bed and his bone carries himself more serenely than another who may or may not find what he needs punctually provided for him. Children can see further into the future than dogs, and can anticipate trouble; and the knowledge of the insecurity of the parents' position, and of the precarious hold they have upon the necessities of life, produces in the children of the poor, however well they may be guarded, a sense of uncertainty, which is a foe to the sense of discipline, and to the habit of order. Where, as too often is the case, these outward difficulties are not minimised by the parents, but increased by intemperance and shiftlessness and apathy, it is clear that the lot of the children becomes worse. But for all, those who are cared for as well as circumstances permit, and those who are less happy, school days are days in which order is demanded and in some manner enforced; days when there is one regularly-recurring duty (recognised even when evaded) of attendance at school, of proper behaviour there. This, we think, is at present the best that the schools offer to the children who are sent to them.

But let us look at what awaits the boy when he leaves school.

The child of working-class parents leaves school as early as he can in order to become a wage-earner. Beginning at a small wage, which yet makes an appreciable addition to the purse of the family, he gradually advances till the time comes when he is paying into the common store more than he receives from it. Until this point is reached the parents have some, though little, control over the boy; but as soon as he feels that he is independent of his family, and that his family is even in some measure dependent on him, the relation is reversed; he is pandered to, and coaxed, and flattered, but rarely "crossed," for it is known that the least annoyance or provocation will drive him from home. It is not our present purpose to pursue the lines of enquiry which are here opened; but it is necessary to notice that the years from thirteen to seventeen or eighteen, the most difficult and dangerous, perhaps, of any boy's career, are in the case of working lads open to very special difficulties and peculiarly grave dangers. For with growing independence these prematurely grown-up boy-men lack the responsibilities which for men ordinarily accompany increasing freedom; and they are under no such control as that which is exercised over their contemporaries in other classes by the vigilant eye and firm hand of the schoolmaster and the parent. That the results of this lack of control, at an age when control is specially needed, are disastrous is well known; but how they come about is not so generally recog-

nised ; and we think it may very fairly be claimed that it is the influence still surviving, though latent, of the school which prevents these evil consequences from becoming more serious than they actually are found to be.

The general considerations which have just been raised will not, we hope, be regarded as foreign to an educational inquiry. It is quite idle, unless we do it consciously, recognising this to be but one step in a process of investigation, to abstract intellectual considerations from the moral and social questions with which they are intimately and inextricably bound up. If we inquire what is the relation between school life and after-life in the case of working people, we are forced to consider the moral temperament which is common among them, and the social circumstances in which their days are passed. And it is no discredit to our elementary schools that what they impart to their pupils is no mere accomplishment, but a gift, the value and effect of which is to be discovered in their conduct and character.

Yet this lesson is taught most effectively when it is taught indirectly ; and we ought to inquire what impression the teaching of the ordinary school-subjects makes upon the children. Do they leave school with a taste discovered and fostered for any particular subject ? Are their powers of observation quickened ? What do they like ? Have they any special interests ? Have they the capacity for taking an interest ? What do they read ? Do they read at all ? The answer to such questions is, it must be admitted, painful to hear. There is, perhaps, something in the national temperament naturally hostile to the efforts of the schoolmaster ; something which makes intellectual exercises, in themselves, distasteful to us. The boy of the working class resembles the boy of the other classes in this—that he is an English boy, and it will hardly be contended that when an ordinary boy of the richer or middle classes leaves school for his father's office, or for the University, he has any feeling so strong, or so near the surface of his consciousness, as the feeling that he can now do what he likes. Unhappily, as he does not know what he likes, this newly-gained freedom is apt to become the negative liberty of not doing any longer what he has hitherto been forced to do. Accordingly, since reading represents in general school-work, the boy who goes to an office shuts his books ; another who goes to the University, perhaps also shuts his books ; or, keeping them open, either shuts his eyes or fixes them elsewhere.

The love of knowledge is an attribute of man ; our schools attempt to encourage and foster it ; they do not indeed eradicate it. Books are not the only sources from which knowledge may be got, though when we think of schools we are naturally inclined to think of books as being themselves the storehouses of knowledge, and as providing for those who will use them the kind of mental exercise by which it may be acquired. It might well be

expected that boys should learn in school not merely to read, but to like reading ; to find out that a natural appetite, of which they are more or less aware, may be satisfied by means of books.

Yet there seems to be very little evidence to suggest that a love of reading, a disposition to turn to books for amusement and pleasure are, except in very rare instances, acquired in our elementary, any more than in our other schools. Nor have we explained this anomaly when we say that it is natural that school books should be thrown aside when school days are over ; for other books do not take their place, and the question must be asked, are school books necessarily and essentially uninteresting and unattractive to boys ? It must be confessed that many of them are. What could be less likely to arouse an interest in his country in the mind of a boy than many of the history-readers and text-books, which are put into his hands—fragments of biography, inartistic and lifeless, or else continuous records of facts, all apparently equally important, and all certainly (when thus set down) equally unintelligible, arranged in a chronological sequence, which can have nothing striking for the imagination, nothing tangible for the memory ? Or if we look at the reading-books, what charm have many of these ? Is it surprising that when literature and history are thus presented, they should fail to attract a boy's attention and gain his admiration ? It may, of course, be said that work is work, and play is play, that the habit of attention is not to be easily acquired, and that labour is necessary to enjoyment. A man may enjoy his dinner, and yet dislike the work by which he earns it. This is true, but it is not a high view either of work or of its reward ; and it may well be doubted whether any work which is done in this spirit is of much value either to the man who does it, or to his fellows. But, as regards intellectual work, the doctrine is false and misleading, and it is peculiarly dangerous when it is applied to the work of a school. Discipline must be kept, and labour must be exacted, but there should be no radical distinction between discipline and happiness, between labour and enjoyment ; and we believe it is because somehow this distinction has been established that an antipathy to books and to reading has grown up in the minds of so many children.

It is easier to find fault than to suggest a remedy. It is said with much truth that the number of reading books really suitable for children and pleasant to them is small ; but children are conservative and do not readily tire of what they once have learnt to like in this kind, and it seems to us that it would be a far greater achievement for a schoolmaster or mistress to be able to point to some well-thumbed volume which his pupils knew really by heart, than to show that they could read with a vacuous fluency half-a-dozen dull primers, full of unappetising instruction, and calculated to be a test as much of their patience as of their proficiency. But unluckily reading is too often regarded either as an end in itself (as though the mere formal interpretation of the symbols of written

characters were all that could be desired) or else as the means to ends, useful of course, but in their nature transitory, as, for instance, the deciphering of an advertisement of vacant situations. Whatever may be said of the commercial value of education (there are still those who find something paradoxical in the phrase), it must be borne in mind that children of school age can hardly understand the point of view which is represented by the words, and that unless their work is at once and immediately its own reward, it will be unlikely to lead to any other and more external prizes.

It is the more important that this should be held in mind by those who arrange and conduct the teaching of the children of the poorer classes, for the school has to do far more for these than it need do for children of happier fortune. The latter get much of the best and most permanent elements of their education at home from their parents or in the nursery, and they are rich in the nursery literature and children's books, many of them most admirable, of which there is a liberal supply for those who can buy them. These are books with which children can make themselves at home, which are congruous with the fictions in which their own imagination is fertile, and at once captivate and enlarge their minds. For children whose mothers are always too busy (even if they were inclined) to read stories to them, who have no nursery, and no such pasture of wholesome nonsense in which to browse, it is obvious that the school must do far more than it need do for those others, unless reading is to be a painful task to be performed under compulsion and abandoned as quickly as possible.

School work, then, must be interesting if it is to be successful. An interesting book will seize the attention and fire the imagination of a child, but more potent than the charm of the book is the influence of the teacher himself; he must be interested in what he is doing if his pupils are also to be interested. But there are many conditions which tend to limit and dull the interests of the teacher. In the first place he is too often expected to be able to teach all the subjects which the children have to learn, and they themselves are often overwhelmed by too great a number of subjects. All these subjects cannot be of equal interest to the teacher and it is probable that some of them at any rate will be quite uninteresting, or even distasteful. Moreover, the very fact, that he is required to teach a large number of different subjects, is apt to dissipate his attention, and to keep him from following the line of study which is most congenial to his nature. He is likely to become content with what he considers a decent knowledge of a large number of subjects, and has not the time nor the freshness of mind requisite for the mastery of any one. And this is serious, for there can be no doubt that children are very ready to be impressed by real excellence in any direction; they respect eminent gifts of mind as well as they admire mere physical superiority, though their praise is silent, rather than clearly expressed.

Our teachers are, as a class, overworked. They have often to

deal with classes so large that it is impossible for them to come into personal relationship with their pupils, and they thus miss what should be one of the most invigorating influences which can be brought to bear upon a teacher's life, namely, intimate intercourse with children.

The conditions, in fact, under which they work too often prevent their working efficiently and well, and they cannot be blamed for being depressed by depressing circumstances. They ought, however, to recognise, as the most accomplished of their number do recognise, that in order to teach a subject you must first of all know it.

Further, it ought not to be forgotten that the correlative of teaching is learning, and that children must not always be spoon-fed; that they must not only receive information which is prepared for them, but must make some active effort on their own part to acquire it. Not a few excellent teachers are too intent upon teaching, and leave too little for their pupils to do. Here, again, the teacher raises a barrier between himself and his class; he is treating his pupils as beings of a nature different from his own, but his real business is to co-operate with his pupils, to share with them the interest he already feels; to explore with them a region in which he has already travelled, but through which he desires companions in his journey.

Again, the value of school work could be greatly increased and its progress made more pleasant, if some simple measures could be taken more commonly than is at present the case to bring teachers into relation with the parents. It is an excellent custom of teachers in some infant schools occasionally to invite the mothers of their young pupils to be present at an afternoon meeting of the school, so that they may see what is actually going forward. Such a practice, of course, cannot often be adopted in any school, and in many it would be quite impracticable, yet it is very desirable that teachers and parents should know one another, that the former should have some knowledge of the circumstances in which their pupils pass their time out of school, and should make themselves acquainted with the desires of the parents, where any desires have been formed, as to the future of their children; that the parents in their turn should know what the children are doing in school, and what progress they are making there; and last, and not the least in importance, that the children should see that the parents take a real interest in their school work. This is unfortunately too rarely the case, and if an improvement in this respect is to be brought about, it would seem that the initiative must be taken by the teachers themselves. To write a periodical report upon the progress and conduct of the children is, of course, a heavy additional task for the teachers, and it is not often undertaken. Perhaps an equally good, if not a better result might be obtained, if, from time to time, children were compelled to take one or two of their exercise books home for their parents to see, and bring them

back initialled or checked in some way, so that the teacher might know that they had actually been shown at home. The lack of connection between school work and out-of-school occupations goes far to make lessons appear uninteresting and unimportant to the children.

In what has previously been said we have had mainly in view the reading lesson, because it stands best as representative of most of the lessons, and because it seems to be intrinsically most important. And we have been thinking of the ordinary boys, the great majority, who show no special promise of excellence in any direction.

The work of teachers would be pleasanter, though not necessarily easier, if their pupils displayed some special aptitude or had a strong bent, which it was clear that somehow or other they would follow with determination. It may be, of course, that the arrangements and curriculum of our schools and the accomplishments and physical vigour of our teachers are not always of a sort to encourage excellence, which is another name for peculiarity, in the children; and, after all, the matter is not of the serious importance which we sometimes are apt to give to it; the best that the ordinary teacher can hope to do for the extraordinary child is not to do him any harm; the genius can take care of himself. But surely the ideal which should be kept in view of teachers, and of all who have to do with schools, is that their pupils should become educated men and women, and by this is meant something upon which critics of different camps may well agree. When we speak of an educated man, clearly we intend to point out one who not merely is able to do his work in its narrowest limits, but one whose view is larger than his occupation, who can see further than he goes, and who finds in himself the sources of enjoyment. Now there is nothing more deplorable than the inability of the average working-class boy to amuse himself, nothing more full of evil possibilities for the future of the community than his vacuity and lack of resource. His powers are either dormant, or, if they are awake, are in danger of corruption for want of proper exercise; and how to exercise himself is precisely what such a boy does not know.

We do not stay here to speak of the great difficulties which are in his way if he should think of physical exercise in cricket and football; it is often almost impossible for him to find an open space or field on which to play a game on Saturday afternoons. But, of course, he needs physical exercise less than others, for (in most cases) his ordinary work gives him plenty of bodily activity. When work is over, his time is at his own disposal, and he does not know what to do with it. Now it seems to reflect little credit on the schools, that almost the last thing that should occur to such a boy to do is to get a book. If one inquires among the most intelligent working-class youths of say twenty years of age, he learns that though they may by this time have come to find interest in books, it is only recently that the interest has been discovered, and that they owe it (so they say quite unmistakably) not to

school, for school experience lent no charm to reading, but to some more or less accidental influence, entirely unconnected with school. It would appear (and that is not unnatural on other grounds) that the young men who read at all hardly begin to read till they reach the age of seventeen or eighteen years—that is to say, five or six years after they have left school; in the interval they have, indeed, had a literature in their hands, but it has consisted entirely of the grosser illustrated publications and of the less admirable halfpenny evening papers, which are read for the police and the athletic and betting news. In other words, they leave school without interests and incapable of fixing their attention upon any reading, except what is of the most fragmentary character. We quote a letter typical of many others, written by a young working-man* at our request, but entirely without our guidance, which seems to make this conclusion painfully evident:—

“On looking back upon my school-days I often think how uninteresting it all was. It was a small Voluntary School, with lady teachers, and the boys and girls were mixed together. There was an Infants' School, and five standards only, which were to be passed of course before we were allowed to leave. I went to school very young, and consequently passed my standards early, and left when I was eleven years old. There are many things they teach at the same school, now, that they did not teach at the time when I went. We had very little History, for instance, we had no drawing at all; we had no Geography except at long intervals, and then we never got beyond having explained to us what peninsulas were, and islands and lakes and promontories, etc., and this was when we were in our last year at school. We never got so far as countries, towns, industries, habits of the various people, etc., etc. We got nothing of that description, only the rudiments of Geography and nothing more. I had many chums and acquaintances, of course, in the school and class, and they all seemed, like myself, to look forward with a kind of impatient delight, counting the months upon our fingers, to the time when we would be able to leave school and commence work. We never seemed to realise the benefits our education should be to us after our school-days were over. There was also Grammar, for instance. They taught us how to distinguish a noun from a verb, what pronouns and adjectives were, how to parse a sentence, etc., but we could not for the life of us understand what the good of it all was, and I, like the rest of my chums, had little interest in our work, and as I said before, wished many times it was all over. I cannot but blame the teachers for being the chief cause of this, for not once do I remember them ever trying to impress upon our minds the benefits education should be to us, in our advancement in life in the future days when our school-days would be over. And then, of course, there was Reading. Well, I was particularly good at this myself, especially in my last year. I was the best reader in the class, so it was said, and being in my last year, which was of course in the highest standard the school then had, I was naturally considered one of the best readers in the school. But then I was far from being infallible in this respect, and reading, like the rest of the lessons, became distasteful. Perhaps more so to the rest than to myself. We of course read in our turns certain passages, and whenever we came to a larger word than usual the teacher would give us the right pronunciation, if we failed to say it correctly after her we were punished with the cane. Although in many instances it was plainly to be seen by the expression on the face of a particular scholar that he or she was trying honestly and sincerely to do their level best, still we were punished

* Twenty-four years of age.

just the same, which instead of giving us a determination to try better, only caused us to become down-hearted and to lose interest in our work. The teachers were far too imperious in their teaching, and the cane* was far too often in requisition to my mind. In my retrospection of those days I cannot but feel what a shame it was that some scholars, who teachers could plainly see were trying their level best, should be so often punished. They did not seem to realise that the mental faculties of one scholar were not equivalent to those of another, and I think if there had been less punishment and more encouragement we would have taken more interest in our work. It may be different now, that I cannot say, but we got little or no encouragement then, which had the effect of causing us to look upon our teachers as so many tyrants and unfeeling slave-drivers. I have read many books since I left school, but I can truly say that reading at school gave me no inclination whatever to read any kind of literature when I was at home. I remember trying to read books on two occasions when I was attending school, books that were very good ones, as I have since found out, but then I threw aside impatiently through lack of interest, for it was more out of curiosity than interest that I commenced to read them. And when I came to think of how it was taught us at school I considered we had quite enough of it there without trying it at home. In diverting your attention from school for a little I can say that I commenced to read for myself when I was about the age of fifteen. I then commenced to read those penny dreadfuls as they are called. I read a large number of these until the halfpenny dreadfuls were circulated round the country, such as "The Pluck," "The Marvel," "The Union Jack," "The Boy's Friend," and numerous others. These I bought and read profusely until I was about the age of seventeen. Then I was advised to try a book that was more sensible. I tried one. I think it was "Treasure Island" by Stevenson. This I read and enjoyed immensely. I then read several other books, and my strong infatuation for dreadfuls gradually vanished and after a time utterly disappeared. Since then I have read numerous books, novels being my favourites. My favourite authors are Dickens, Charles Kingsley, Lord Lytton, and Scott. We had writing, of course, which I was repeatedly punished for, for although I almost invariably spelt my words correctly I was often punished for bad writing. This was due to the fact that I had then unsteady nerves, which I have had ever since. The teacher knew this, but nevertheless I was punished just the same. This I also considered an injustice, and consequently hated writing. And we also had singing by tonic sol-fa. This I was very good at. I had a fairly good voice then, and often I had to sing the scales in front of the class. She would then choose four or five of the notes from the modulator, as the sheet was called, and sing la la to them, and we had to judge which notes she sang, and I have often heard her say that I was certainly the best judge. I also remember on one occasion we were being examined by the inspector, and when the time came for singing and he sang the usual la la problems, which ended up the lesson, there were only two besides myself that raised their hand signifying that they had judged the notes. They both gave wrong answers; I fortunately gave the correct one. He sang several more and my judgment proved correct on almost every occasion. He eventually singled me out and made me answer alone, and I repeatedly gave him the correct answer, and as he walked away from the class he had a broad smile upon his face, and he said to the teacher, 'Very good indeed.' When he had gone she promised me a present. It is needless to say I never got it. I don't wish you to think I am boasting, far from it. I am merely stating facts of my experiences. I liked this lesson better than any other. I had a fairly good ear for music, which gave me the ability to answer correctly, and being punished on only very rare occasions indeed, I took a great interest in it. I feel now that it

* It will be remembered that the writer is reviewing his own school days' not speaking of schools of the present day.

would have been far better for me if I could have taken the same interest in other lessons that were of far more importance. In fact we all liked singing, especially when we sang glees all together, which consisted of all the five standards. It was so difficult for a teacher to distinguish individual wrong singing on these occasions that there was practically no punishment at all. So you see that it was the lessons that had the least punishment attached to them that seemed to me, and to all appearances to others, to be the ones that were most enjoyed and interesting. There is a proverb which is often quoted, viz., 'Spare the rod and spoil the child.' Well I think that if in day schools this proverb was reversed or alleviated a little more the rod would be used less of course, and the child would be spared a deal of downheartedness, disinterestedness, and anxiety of mind, which I feel sure would in time prove not only a blessing to the scholar but to the teacher also. And so the time eventually came for us to leave school and we gladly left. But I have often said since, and I have heard others say the same thing, that if I only had the opportunity to go to school again I would study my lessons better than I did do. And I repeat what I said before, that we were not impressed as we ought to have been as to the benefits of education as we passed through this world. If we had been I feel that many who would have had the good sense to have realised the truth of it would have taken, in spite of punishment, more interest in their work, and consequently would have known more than they do at present. But now it seems too late for a good many that have not the opportunity to go to night schools, and who have no inclination to try and study for themselves, and they can only look upon the past as an opportunity that was missed, and a blessing that might have been if they only could have realised how much they would miss it in their future days."

This letter bears the stamp of truth. The dreary recollections of school life are summed up in the eloquent sentence, "And so the time eventually came for us to leave school, and we gladly left."

Of course, there is much to be said by way of excuse. In the first place it may be urged—though the argument is one from which but scanty consolation is to be derived—that in this respect young men and boys of other classes are often almost equally at a loss in leisure hours, and almost equally unable to read with ease and pleasure. But leaving this comparison, which it would not be uninteresting to pursue, it may very truly be said that there are peculiar obstacles in the way of a working lad who wishes to read (in order to pass the time) for amusement. He has few books or none at home; and if he has books, he is hardly likely to be able to read without interruption in a crowded kitchen. To go to a public library is to make a great effort, nor are his troubles at an end when he gets there. In face of a large catalogue, a boy is naturally perplexed; he generally does not know what he wants, and if he does, it is not always easy to find it. Before public libraries can become as useful as they ought to be for such boys, some direction must be given them in the choice of books, some friendly help must be offered in the actual reading, and, not least important, far better provision must be made in the reading-rooms themselves. A very small library, of a hundred or two hundred books, all accessible and within view, in charge of an intelligent and sympathetic man, who would encourage the boys to begin and continue a book, and—where somewhat serious reading might be attempted—would suggest a sequence of books, and talk without pedantry about them,

would be a greater benefit than a library stocked with thousands of volumes, all useful, and almost all untouched.*

Much more might be said in extenuation of this general defect ; but the ultimate explanation is to be sought, not in the difficulty which such boys experience in finding books, but in their disinclination to read.

It would seem to us that there have been two cardinal defects in the elementary education which was given to such boys as we have had in mind ; in the first place, that, with whatever generosity it has been provided, with whatever zeal and patience the teachers have done their work, the interest and sympathy of the pupils have not been sufficiently awakened ; and whether this conclusion is correct, or as we would gladly believe, incorrect, it is certainly the conclusion which a very large number of working boys and young men themselves reach when they reflect upon their own school days.

And secondly, it must we fear be admitted that even though in the specific subjects which make up the school curriculum considerable knowledge may have been acquired, yet this education has very largely failed to touch the imagination or to help in the formation and preservation of ideals of character and conduct—ideals which exercise the most potent influence upon the welfare not only of the individual in whom they should be found, but also upon the community to which he belongs. It is far more to the consolidating power of such ideals upon the life of a nation than to technical skill in the several branches of industrial activity that we have to look for natural and healthy development, for co-ordination of interests, for the spirit of sympathy and understanding between the different classes and ranks of society. Without specialised skill and training no doubt a nation must be weak in itself, and wholly unable to meet the strain of foreign competition, but it is only upon the basis of a general culture, which shall include not merely mental, but also moral and æsthetic elements that the fabric of the special sciences can be properly and happily established.

If therefore we have discussed at some length the value of school training as a preparation for life, it is not merely because of the intrinsic importance of the subject, but largely because it is a matter which must be carefully considered before we can pass to the more

* The librarian of a boys' club in Ancoats supplies us with some useful information on this head. A very good public library is within easy reach of most of the members of the club, but it has been found that they do not use it, and, in fact, do not know how to use it. The club library, containing about 300 volumes of boys' books, and of the greater novels, is constantly used. It would appear that Dickens and Henty are the favourite authors, but others also much read are Scott, Stevenson, Kingston, and Marryatt. It is worth noting that though plays of Shakespeare seem very rarely to be taken home, they are often to be seen in the hands of the older boys (*i.e.*, boys of seventeen to twenty years of age) in the club reading-room itself.

special question of the value of school training as a preparation for the several kinds of definite employment into which boys and girls afterwards enter.

It would be foolish, even if it were possible, to estimate this value by the capacity of the children to turn what they have learnt at school into money. There are, no doubt, parents who ask what is the use of schooling, and imply that inasmuch as a boy's market value is not certain to be increased by a longer stay at school, there can be no possible advantage in prolonging the period in which he is only a cause of expense, and contributes nothing to his maintenance. And it hardly needs saying, on the other hand, that it is the prospect of their being able immediately to earn wages, which is the motive which prompts many parents to remove their children at the earliest possible moment from school. The years in which poverty presses most hardly upon the working-class are manifestly those in which the children are all of school age or under it ; gradually as they grow older and at last perhaps three or four of them are earning wages, even a poor family becomes, not necessarily a comfortable and well-equipped household, but yet one which is drawing from several sources an income larger than that of many men who belong to what are called the professional classes. It is not unnatural that such people should ask, what is the use of education ; and if they would but modify it, and enquire what is the good of the education which the children are actually receiving the question would become one which deserves a serious answer.

Neglecting the grosser consideration of monetary returns, it may very reasonably be asked how far special aptitude for school work and special proficiency in it affect (1) the nature of a boy's or a girl's subsequent employment, (2) and the success likely to be attained in it. It would appear that in the choice of employment boys (and in a less marked degree girls) of the working-class have, when they leave school, a far greater amount of freedom than is common with the sons and daughters of richer parents ; for to say nothing of the barriers set in the way of certain professions and callings by the sometimes foolish sentiment and prejudice of the latter class, it is certainly true that it is in general easier for the children of the working-class to obtain employment than for their apparently more well to-do neighbours. Indeed, in most trades represented in this district, the difficulty is not for boys and girls to obtain employment, but for employers to find boys and girls ; with the result that in most instances it is quite impossible for employers of labour, without incurring some immediate inconvenience and perhaps loss, even if they wished to do so, to exact any definite standard of school attainment from candidates who seek situations in their service. Boys and girls must no doubt keep their eyes and ears open ; they must take the trouble to present themselves at the right time and place when they are

seeking an engagement; but if they are prepared for the effort, chiefly an effort of determination, which this involves, and are ready to undertake work, they can find work of one kind or another, however well or ill they may have acquitted themselves at school.

If, however, these boys have a large range of choice it is very seldom that they deliberately choose an occupation. They are guided by accident and circumstance, rather than by preference and taste. What most of them want is, not to become craftsmen in this or that particular industry, but to earn wages; and this is what their parents want for them; and neither boys nor parents look beyond the needs of the present moment.

It is very instructive to watch the steps which a boy takes in search of work. He announces to his parents that he is going to look for work, or they tell him he must do so, and he sets off without consideration townward looking out for whatever may offer.

Let us suppose that the first place he hits upon is a goods warehouse of some railway company. He walks into the agent's office and asks if any "nippers" are wanted. The work of the nipper is rough, but not unpleasant. He has to look after the goods on a lorry while the carter goes into the various houses at which he must call. The nipper must be able to read well enough to make out readily the addresses upon the packages, and to write legibly, for he has often to make out consignment notes. He must have these two qualifications, but no special look-out is made for smart boys, though some companies (as *e.g.* the London and North-Western) will not accept in this capacity boys who have not passed the Sixth Standard. This work is less popular with boys than it used to be only a few years ago. In Manchester, at any rate, we learn that the railway companies are always in want of nippers, and the demand for them far exceeds the supply. This is the more remarkable, inasmuch as (not to speak of the character of the work, which we would have thought likely to please young boys) the rate of wages was raised a few years ago from 5s. to 6s. a week to begin with—the result of a strike on the part of the boys.* A boy, therefore, who applies for one of these posts, is likely to get it without much difficulty or delay. The disadvantages of the position appear later; for a boy is seldom retained as a nipper after the age of seventeen years and a carter is not usually appointed under twenty-one years of age. The interval between these ages is the most troublesome time to such youths. They may get some rough work on the railway station; they may become goods porters, but there is no certain prospect, no continuity upon which

* This strike took place in November, 1899. Up to that time nippers began with a wage of 5s. a week, to be raised to 6s. at the end of a year's service, and to 7s. at the end of a second year. By their strike they gained the following terms: beginning at 5s., they were to be advanced after three months' service to 6s., and after another twelvemonth to 7s., the maximum wage; they also secured certain changes in the hours of work.

they can reckon, and many of them fall out of their first employment without having learnt anything which will help them either in finding or in prosecuting a new occupation. The work, however, while it lasts is good; it is done in the open air; and though the hours are long (generally twelve hours a day), those who enter upon it seem to enjoy it. It is clear that except in the two points which we have named a boy's schoolwork does not definitely assist him in this occupation; and though some companies make the provision to which we have referred, it is curious to note that others, by whom no such restriction is placed upon the selection of candidates for this employment, maintain that a boy's smartness and general usefulness bear no relation whatever to his record at school.

But let us turn to another kind of occupation. A boy may think the work of a nipper too rough, and the hours too long for him, and decide to become, if he can, an office boy.* More often his decision is made almost mechanically, if he happens at the beginning of his search for employment to see a notice, "Office boy wanted." This work again has its special attractions. The office boy begins his day later, and ends it earlier than the nipper. If he gets a small wage (commonly 5s. a week, at first) his work is light. He sweeps the office, runs errands, copies letters, keeps a stamp account, and his duties are over. Moreover—and this counts for more than a little with many boys—his work can be done in his Sunday clothes; it gives some sort of social distinction, for is it not the first step towards a clerkship? and he has longer holidays than many of his friends who tread humbler paths. The forecast is generally more brilliant than the retrospect. In a large office, with many departments, a boy has no doubt a fair chance of promotion; but where only two or three clerks are employed, vacancies are not likely to occur at all frequently, and by the time the office boy has grown out of the clothes and the rather childish ideals with which he started, he discovers that his wages have reached their poor maximum, that his employer would be contented with the services of a new boy who would begin again at the bottom, and that the clerks on whose decay and decease he had so confidently reckoned, still live. And he sets out once more to become he knows not what.

We have made very numerous enquiries both among employers who use the services of a large number of clerks and boys, and of others who need only a small staff, as to the qualifications which these boys should possess. They ought to be able to read and write well, and to use the simpler rules of arithmetic with ease and rapidity. Here one would suppose that the training of the schools would certainly prove of practical value. But what we are told by many employers, who agree in nothing else, is that though the boys can read and write and do their sums well enough to have passed with credit from their schools, their

* This section has been submitted to Mr. Elijah Helm, Secretary of the Manchester Chamber of Commerce, who endorses the opinion expressed in it.

general intelligence is so little developed that they can seldom perform any of these operations satisfactorily in circumstances with which they are unfamiliar. They cannot make themselves generally useful; they are unable to pick up information as they go about their work; they lack initiative and vigour of mind.*

* The following letters, which we have leave to publish, put the matter with clearness and cogency:—

Aytoun Street, Manchester,
13th March, 1901.

"MY DEAR SIR,—I have been very busy, and must apologise for the delay in answering your note of the 7th inst. When we want a boy in the warehouse we test him ourselves, and often find that, though he has passed a high standard, he can neither write decently or spell correctly, nor work very simple calculations neatly and without errors. Really good writing is very rare. Personally I should pay no attention to 'standard.' If a boy has got the three R's correctly, and with facility, and has good physique and general intelligence he can soon learn business.

If I wanted a boy to be trained for a leading position I should prefer one from the classical side of the grammar school. The worst boy of all is one who can neither write, spell, nor do sums correctly, but who has a smattering of so-called science.

May I call your attention to the remarks of Mr. I. Levenstein on p. 9 of to-day's *Guardian*, at the meeting of the Associated Chambers of Commerce. I agree with everything he said.—I am, Yours truly,

(Signed) EDWARD DONNER.

E. T. Campagnac, Esq.

68 and 78, Bindloss Chambers,
4, Chapel Walks, Manchester.
11th March, 1903.

C. E. B. RUSSELL, Esq.

DEAR SIR,—Being only a small employer of labour, and that labour only being amongst girls, I feel diffident in expressing my opinion upon the subject upon which we spoke a day or two since, but as you desired me to do so, I will endeavour to embody my ideas in letter form.

When asked if, in my opinion, the girls who come to me from the Board Schools, as apprentices to Typewriting, are well equipped by the instruction they have there received, I must say emphatically "No." I consider my business is one that is an excellent test as to this. A knowledge of grammar, punctuation, orthography, simple facts in history, a slight knowledge of geography, and, above all, some idea of the meaning of very ordinary English words is necessary, and in all these points I find the larger percentage of girls who come to me are woefully deficient. But there is another point in which I consider they fail even more, and that is the ability to apply to their work the reasoning and deductive faculties they must necessarily possess. Their minds, I feel sure, are well stored with facts, but they resemble a box with its contents in such disorder that nothing is forthcoming when required. I am not competent to suggest even what the remedy should be for this state of things, but in my humble opinion it might be better if more time and attention were given to training teachers how to teach, in impressing upon them the necessity that their scholars should get a firm mental grasp of the *meaning* of what they are taught, be that ever so small. If this were so, one would not have to tell of a little child going home to her mother, and repeating as part of the text taught her that day at school, "They shall live in a parish"!

Yours faithfully,
MARY McLACHLAN.

What was observed in regard to the work of nippers is also true of the work of office boys. A strong and widely felt dislike of office work is now to be noticed among boys of the working class. Formerly it was not unusual when such a position was advertised for thirty or forty applicants to present themselves. Recently, not a few instances have been brought within our own notice—and the observation is confirmed by what we learn from various sources—in which advertisements offering employment of this kind have not met with a single response. There may be a fashion in these things, but the knowledge, or at any rate the suspicion which boys entertain, that the work of an office boy (never highly paid) will probably lead on to nothing better, is the main cause of this change.

The characteristic industry of this district is, of course, that of weaving and spinning; and it is one in which girls are employed in larger numbers than boys. Beginning under the half-time system (which goes very far to undo the good effects of school-life) as a tenter (or assistant to a weaver), the young hand is gradually advanced to the charge of one or two, or perhaps four looms, and then no further progress is possible; for the skill required in the operation is provided by the machine and not by the employee, who at best, and from first to last, is only following and attending to it. There is little room for initiative in the work of the weaver; a sufficient manual dexterity is all that is either demanded or given. Foremen and managers are few; and their positions are often hereditary, descending from father to son. But for the great majority of the operators, who are unable for many causes to adopt such a course, there is no hope of continuous progress. A very striking commentary on the result of this system was made to us by a well-informed foreman, and was confirmed by his employer, the owner of a large mill; he said that improvements in the method of weaving, and in the construction of the machines, are hardly ever suggested by the weavers themselves. They come from engineers and manufacturers of weaving machinery. Working men will not agree without a murmur to this doctrine; they maintain on the contrary that such improvements as are offered by themselves or their colleagues, are either ridiculed and set aside, or else appropriated by their official superiors. But they will admit that it is at best but rarely that such suggestions come from those who might well be expected to think carefully about their work and to devise means of improving it.* There are still many workpeople who look with alarm at the extension of the use of mechanical contrivances, and one hears that there are those who even do what they can to hinder their adoption and spoil their work. They are clearly

* In the United States employers are much more ready than they appear to be in England to encourage the suggestion of improvements by their work-

misled by an economical fallacy. There is nevertheless an element of truth and justice in the opinion which they thus unjustly and untruly express. There is often less co-operation between the manager and the operatives of a mill than between a good carter and his horse; and there can be no question that when a machine comes to do the work not of the human hand, but of the human brain, the hand that tends it will become less than mechanical (for it is subordinate to a machine), and it will move with less and less intelligence. But it is this position of subordination to a machine which the weaver takes, and we must not wonder, when this is recognised to be the case, that his employer cares very little about his intelligence, and knows nothing of his school attainments. The best that can be hoped for, while such a state of things lasts, is that the lessons of school shall have been so invigorating and quickening as to resist the* deadening influence which the daily employment must inevitably have upon the mind of the worker, and give him the spirit and the knowledge with which to turn to good account his scanty leisure. But such a hope is built upon the most unsubstantial grounds.

To take yet another instance. A very large number of boys

people. An example, which might with advantage be largely followed in England, is set by Messrs. E. Wood and Co, Limited, of Salford (The Ocean Iron Works). Here a box is provided for suggestions from the workmen: it is opened every month, and a prize of 5s. is offered for the best suggestion, whether acted on or not. If the suggestion is acted on a special arrangement is made with the man who made it.

A similar practice obtains at the works of Messrs. Cadbury.

* Cf. Adam Smith. *Wealth of Nations* (Book V., Chap. I., part iii.) "Of the Expense of the Institutions for the Education of Youth":—"In the progress of the division of labour, the employment of the far greater part of those who live by labour, that is, of the great body of the people, comes to be confined to a few very simple operations; frequently to one or two. But the understandings of the greater part given are necessarily formed by their ordinary employments. The man whose whole life is spent in performing a few simple operations, of which the effects, too, are, perhaps, always the same, or very nearly the same, has no occasion to exert his understanding, or to exercise his invention in finding out expedients for removing difficulties which never occur. He naturally loses, therefore, the habit of such exertion, and generally becomes as stupid and ignorant as it is possible for a human creature to become. The torpor of his mind renders him not only incapable of relishing or bearing a part in any rational conversation, but of conceiving any generous, noble, or tender sentiment, and consequently of forming any just judgment of many, even of the ordinary duties of private life. . . . His dexterity at his own particular trade seems, in this manner, to be acquired at the expense of his intellectual, social, and martial virtues. But in every improved and civilised society this is the state into which the labouring poor, that is, the great body of the people, must necessarily fall, unless Government takes some pains to prevent it."

find their way into ironworks or engineering houses of various kinds. When they do not fall into such work by what looks the merest chance, they may be led by some natural taste, or more often by a desire formed without any clear reason of becoming "fitters" or "gaters" and so forth. In many places a loose system of apprenticeship is in vogue. No indentures are signed, but the boy regards himself, and is regarded as an apprentice, and he has the expectation that if he works from fourteen till eighteen years of age at a small wage, and learns his craft, he will at length get a position of some responsibility and a wage of 30s. or so a week. The expectation is constantly disappointed. It is perfectly easy for him to begin the work; the demand for boy labour here again is great; and a boy need have neither a specially good school record behind him, nor (what is often a determining factor in the choice between this work, and that of, let us say, an office boy) a good suit on his back, in order to make sure of admittance. But once admitted, he finds that he is set to some work which either calls for no intelligence whatever, except perhaps of the meanest kind, or which demands so little intelligence that all that needs to be learnt for its proper discharge is very quickly got. At this work he remains week after week, and year after year; his mind dormant while his hands are moving with the precision and the dulness of an engine, and by the time he has reached the age at which he thought he should be worth a better wage, he discovers that except in physical strength and endurance, he is of no more value either to his employers or to himself than he was on the day he began his work. He is in fact in a worse position than he held four or five years previously; for his mind is heavier and moves less readily. Nor is the case better of those boys who show some special proficiency in the particular operation to which they are at first set. For they are only too often made to devote themselves exclusively to that, and so while they may acquire a truly marvellous dexterity in it, they have no general knowledge of the work of the firm to which they belong, nor even any notion of the part to be fulfilled by the piece of work produced by their own hands in the particular machine of which it is to be a portion.

It is quite obvious that an employer may make an immediate profit out of such a system as this. The whole work is minutely sub-divided, and the fragments of it are made with remarkable speed and perfection by the special operatives in charge of each, and, moreover, work of this kind is cheaply bought. But it should be equally obvious that such an arrangement, however profitable it may be at once and for the individual firm, is disastrous in its consequences, first upon the intelligence of the people employed in it, and next upon the general development of the industry in question, and last, and most important of all, upon the country itself in which industry is carried on in so

paltry a spirit. In this respect a small* ironworks or engineering works is often far superior to the great firms. A boy engaged in a small shop, where only a few workpeople are employed, gets a wider experience, inasmuch as he both attempts more kinds of work with his own hands, and has opportunities of watching the work of his comrades. Moreover, his work is more likely to be done in the presence and under the eye of the foreman in charge of the whole system of manufacture, and thus he both insensibly acquires a wider view than is possible to a boy who sees nothing but what is in his own hands, and gets instruction as he proceeds. The contrast is sharply drawn in the following extract from a letter sent us by Mr. Alexander Gray, who can speak with authority on the matter. Mr. Gray writes :—

With regard to the education of boys who work at engineering, I think there is no comparison in the value of the education a boy gets in a small general and jobbing works, as compared with that he gets in a large works.

In the large works he is put on to some rough work, and as soon as he shows any aptitude for any particular kind of work, he is kept at it instead of being put on to all sorts of jobs, as he would be in a small works. This is, of course, profitable for the business, but the training and education of the boy practically ceases.

In the small works, on the other hand, a place employing perhaps a dozen men and boys, a boy is at first put on to the roughest work, but from time

* Some large firms, it is true, provide technical and other classes for their young workpeople, or insist on their attending similar classes provided by public authorities. At the Openshaw Lads' Club, connected with the works of Messrs. Crossley Brothers, the following classes are held :—

Monday.	7.30-9.30 p.m.	Applied Mechanics (Elementary), Machine Drawing (Elementary).
Tuesday.	8-9.30 p.m.	Shorthand (advanced) and Typewriting.
	7.30-8.30 p.m.	Arithmetic (advanced).
		do. (elementary).
	8.30-9 p.m.	Reading.
Wednesday.	7.30-9 p.m.	Building Construction.
	, ,	Mensuration (with use of instruments).
	, ,	Geometrical, Freehand, and Model Drawing.
	, ,	Book-keeping.
Thursday.	7.30-8.30 p.m.	Arithmetic (elementary).
	8.30-9 p.m.	Reading.
	7.30-9 p.m.	Machine Drawing (elementary).
	, ,	Mensuration.
	8 -9.30 p.m.	Shorthand (elementary).
Friday.	7.30-9 p.m.	Geometry (elementary).
	7.30-8.30 p.m.	Writing and Composition (advanced).
		do. (elementary).

There are, in addition, classes for Wood-carving, Fretwork, French, and Singing, and the Violin, as well as for Gymnastics.

to time he gets a turn at something requiring a little skill, and if he shows aptitude, he gets a turn, owing to the exigencies of the business, at a great variety of things; not only so, but owing to the small size of the shop in which he works and the absence of special departments, he always has the opportunity for observing how everything on a job is done, not merely a small portion of it, and thus he gets a knowledge of the thing as a whole, and a grasp of the relations of the various parts of the work and their interdependence. This the boy in the large works fails to get, and this most important education is lost. For the higher positions which an ordinary boy can fairly hope to attain to, such as foreman, head foreman, and manager of a small works, he must have a practical acquaintance with everything which falls within his department, and the wider his knowledge of allied matters in other departments, the more valuable he is; but even for the ordinary mechanic, such as a turner, or planer, or smith, a fair knowledge of what other men have to do and how it is done makes him a much more valuable workman than one without such knowledge, because such knowledge enables him to save either his own or someone else's time by doing what is essential with the requisite accuracy, and doing unimportant work with only that amount of care which is wanted, instead of spending time in doing high-class work when only rough work is needed.

Then again, the boy in a small works has to work against difficulties, and make shift with inferior or ill-adapted appliances, and sees others doing the same, and is thus thrown back on his own resources and mother wit; that wit is developed instead of lying dormant or even being crushed, as it is in large works, where everything has been ready cut and dried by others, who he thinks know so much more than he does that it would be utter presumption for him to try and make any improvements.

Then again, it often happens that the foreman, or perhaps the master himself, who is his own foreman in a small works, is a man of much more intelligence and originality than the foreman in a large works with whom a boy would have to do. This is due to the greater subdivision of labour requiring foremen and head foremen. In the small works there is only one foreman, and he must from the necessity of the case be better than the average foreman in a large works. Thus the boy in the small works is brought into contact with a superior man than in the large one, as a rule.

The effect upon the employee's mind of the sub-division of work in large firms is brought out, we think, very well in the following statements written for us by a young man engaged in one of them in Manchester.

"I commenced work at eleven as a nipper boy, and for a time enjoyed the benefits of open air and good health. It needs but little education for this occupation. If you are able to read and write a little, it is sufficient. The biggest dunces in the class were all nipper boys, with few exceptions, for they were too young to start in a workshop, until they were thirteen years of age. I often recognise some of our dunces, as lorry drivers. In fact, the greatest dunce the school then had is now a lorry driver. I enjoyed this occupation immensely until I was thirteen years of age, and then I went in the iron foundry. There are several iron foundries in Manchester, but they each one have their own particular class of work, which they manufacture. The one I am employed at manufactures cotton machinery. A cotton machine is mostly composed of small parts, which when fitted together complete the machine. My occupation is making what are called cores. These the moulders place in different parts of their moulds, and so form various cavities. I find it very tedious at times, on account of having the same class of work to do day after day. No active brain power is necessary, for the making of these class of cores. We are like a human machine, working

on day after day in our monotonous task. And being monotonous I cannot take much interest in it. The moulders we work for are on piece-work. They get so much per cwt., and although we (the coremakers) are supposed to be on day work, we find it very often as much as we can do to keep up with them, for the average coremakers in our class of work number about 3 per cent. to that of moulders. In our class of work education is unnecessary. A man that has no education can get on equally as well with his work as a man that has a good one. I go to work at six o'clock in the morning, and I am supposed to leave off at half-past five at night. But on account of the moulders being on piece-work we are obliged to work overtime almost every night, and often until very late, so that they can have some cores to start with the next morning. It is necessary that we should do this, for as the cores are made of sand, and have to be dried by means of a large stove, it is some time before they are ready for use. Working overtime I find a great disadvantage to me, for it deprives me of the opportunity of learning at the night school many things I would much like to learn. I had the opportunity the first two seasons, I think it was, that we had a night school at the club. Work was slack and I was not working late. I entered the geography class, and the ambulance class, both seasons. Neither of these subjects were taught us at the day school. In the geography class I was successful in winning the first prize both seasons, although there were lads in the class that had been taught it at the day school. In the ambulance class I managed to pass my examination the first season, but in the second season I was successful in winning a certificate. But now I have to work too late to join any class. You must excuse this small diversion, and I will return again to the foundry.

Education is also unnecessary to moulders in our branch of the trade; I should say over 90 per cent. make only what is called small work. No brain power is needed in this class of work; it is simply practice. They soon get into it when they start as youths, and then they commence very soon to rattle at it, as it were, like so many madmen, to make as much money as they possibly can, up to the usual time of leaving work. They undoubtedly work very hard, not because they take any great interest in their work, not it (for there are so very few of them ever want to work overtime); it is simply because they try to earn as much money as they can, as I said before, up to the usual time of leaving work. I know for a fact two or three moulders that are acknowledged to be as good moulders as we have, and they are very ignorant as regards education. One of them I know, who is a very good moulder and makes the most difficult part of machinery there is to be made on the cotton machine, called the mule. He would have been the foreman now if he had been able to read and write, when he was asked to accept the position. This certainly would have been a benefit to him, but still, on the other hand, although he cannot read or write, he certainly is none the worse off as regards being a good moulder. I also know several moulders that are fairly well educated, and they don't seem to be any better off than the rest of the men; they are no better moulders, and they earn no more money. One man I know in particular, a very steady man, a good man, and a man that is very well educated (that is, considering he has to work as a moulder for his living). He was nominated as a representative for the City Council, in a constituency in Manchester; he put up as a labour candidate, but he was unfortunately unsuccessful. He was thrown out of work some time ago, along with many others for slackness. Most of the others have returned again to work. He is still out of work. I have seen him asking the foreman for a job, and although he is a good moulder and possesses a better education than any of the other men I know, he has been told that they don't require any more at present. So you see that his education does not give him any advantages or privileges in his work. I have worked at this shop for over eleven years, and I have only seen two new foremen, the education of both being only fair. I can certainly say that neither the first one or the other we have now ever pos-

ceased the amount of education that some of the men have that have worked there a good many years. The one that we have now was not appointed foreman on account of his education ; it was simply on account of his having worked at the shop for nearly thirty years. And so you see that a man looking forward to being made foreman when one is needed (which is very seldom) on account of his superior education stands practically a less chance than a man with a fair education that has worked there for a good number of years. I am not writing of foundries generally. I don't profess to know of other foundries ; I am only writing of our own place. Education may be more beneficial to some men in other foundries, where the work is much larger and more difficult, but I don't think so. I do admit that there is much more scope for the use of brain power in other shops, where they manufacture guns, engines, steam cranes, hydraulic presses, and other forms of powerful machinery ; there brain power is absolutely necessary. Your educational benefits are only profitable to you in your being able to measure up with a two-foot rule various parts of your patterns to suit your cores, etc. And this is not worth calling a benefit, for there are very few men in any foundry, educated or uneducated, that are unable to measure with a two-foot rule. But brain power there is necessary, such as studying the best position to place your pattern in the sand ; which is the best place to bring the air away from the mould when you are casting it with metal ; which is the best place to run the metal, or melted iron, into the mould ; where to place your body of cinders in the sand, for the air to pass through, etc., and many other things that are necessary in the moulding and core-making of very large castings. The core-makers make very large cores in these foundries, and they also have to study with the moulder so that they can bring the air away from their cores to suit the construction of the moulds, etc. But these are facts that are unnecessary in this small essay, as I am only expected to write of my own experience and the manufacture of cotton machinery, with which occupation I am engaged. I think if it was necessary for us to study in our particular branch of the trade it would be far more interesting than what it is, because it would drive away the monotony of it. But, of course, in order to do this we would have to manufacture work much larger than that which is necessary for us to have a continual variety of work, because it only needs once studying to make any number of castings or cores of the same sort ; for if after a large casting has been made, and the moulder and core-maker have studied their various parts which were necessary to bring about its completion, they should get orders for another one of the same sort, well they would naturally know what ideas and plans they had formed for the first one and they would work accordingly, and very little additional study is necessary for the second one. But as I said before, it is not necessary for us to study in the making of cotton machinery—in fact, I think it would be more interesting if, in a sense, we knew what we were making. Some moulders make one sort of work, some another ; some small work, some larger than others, but none what we call very large. The core-makers are very few ; there are only four of us, and we, of course, make cores for all the foundry. We go on day after day ; we know we are making work for cotton machines, but what part of the machine any particular piece of work we happen to be making belongs to we do not know. Very few, if any of them, have ever seen any of our cotton machinery in motion, as most of it is sent abroad. We make the castings in the foundry, and then they are taken across to the other side of the street to a separate works, where all the mechanics are, to be finished and fitted up into a machine ; and then they very often fill some of these with cotton and set them in motion to assure themselves of their good condition before sending them out. Now if the men were given the opportunity of seeing some of the various cotton machinery in motion that they had contributed to complete I think that it would perhaps give them a little more interest in their work. They could say, when they had a pattern given to them to make some castings from, "Oh ! this belongs to such and such a machine," and they would realise what the duty of that particular piece of work was and what it was expected to do. Yes, I think

if the masters were a little more condescending in their dispositions and invited the foundrymen, if only a few at a time, to see the results of their labours, I think it might make it a little better all round so far as interest is concerned. But then, I don't suppose that they realise this, and so we must be content to go on as we have always done—working, not with interest, as it ought to be, but simply as a necessity."

The passage which we have just quoted strongly confirms the opinion expressed by Mr. Gray. The monotony and dullness of the work, the ignorance of the workmen as to what it is exactly that they are doing, the mechanical character of their operations, are all set forth with manifest sincerity and with much force. It may indeed be objected here that the writer of so clear an exposition cannot have suffered either from neglect in school nor from the conditions of his later work; but he would himself maintain with complete assurance, though without acrimony, that whatever influences have enlarged his views and made his life generally more interesting to him, have been derived neither from school nor from the work itself. These have not been strong enough to crush his natural gifts; but they have, he thinks, done nothing at all to quicken and cultivate them.

There are, of course, a few firms which exact a certain educational standard from candidates for employment. This demand is not altogether uncommon in engineering works; in the cotton industry it is almost unknown. On this point we have made inquiries from very many employers, of whom we asked the further question, whether any perceptible relation exists between the school attainments of boys and girls engaged by them, and their proficiency and usefulness in the work which they entered? A question like this was easier to ask than to answer, and we are under very great obligations to those employers who were at the pains to supply us with the information which we sought. With regard to the cotton industry our gratitude is chiefly due to Mr. J. Goodier Haworth (of the firm of James Dilworth and Co.), who caused a detailed investigation to be made in a large number of typical mills. Here no educational standard is exacted from the children who begin the work. But Mr. Haworth was good enough to find out in some thousands of instances whether as a matter of fact a boy or girl who had done well at school was at all superior as a mill-hand to others who had done less well or even ill at school. The result of his inquiry was to show that there is absolutely no correspondence whatever between school attainment and subsequent skill at work or even—so far was the investigation carried—between school records and evidence afterwards given of general intelligence. The answer which he supplied to our question was not unexpected; but it is full of melancholy teaching. No school-master can give his pupils nimble fingers; and certainly no elementary schoolmaster ought to give specific, technical training for special work; and yet the commentary made by such evidence as

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The remedy seems to rest principally in the hands of employers. If they exacted an educational standard they would have the power to make whatever standard they chose not merely conventional but a real test both of the knowledge and of the intelligence of the young people who come to them for employment. To do this would be difficult in many cases where work is always waiting to be done by the ill-equipped boys and girls who desire to earn a wage. But if intelligence counts for anything, it must ultimately be worth while for an employer to have in his service not only an intelligent foreman, but intelligent operatives of every rank. And if it is said that the schools do not supply adequate numbers of such intelligent people, though the charge cannot, we fear, be rebutted, we would suggest that it is only by the establishment

* The following letter illustrates the same point:—

"53, Clarendon Road, Whalley Range,
"Manchester, March 10th, 1903.

"DEAR MR. RUSSELL,—You have asked me for my experience of the effect of Board School teaching on the boys whom I come across in business. I have no hesitation in saying that as far as I have seen the 'gutter boy,' or the boy who has not been a success at school is the one I should choose if I wished for a smart, ready-witted lad.

"From the year 1893 to 1900 I was at Middlesborough with a firm who employed a good number of boys, chiefly for weighing tea and delivering parcels, collecting the money for each parcel. Often as many as 2,000 parcels were delivered by twelve boys in one day. Each boy would collect about £6 10s., in small amounts, varying from 4½d. to 2s. 4½d. This was the work given to new boys, of whom we had many. One test question given to each applicant was, 'If a woman gives you half-a-crown, and you want 1s. 7½d. out of it, what change will you give?' Not more than one boy in ten would answer correctly after some thinking. It was a striking fact that those who answered correctly were, with few exceptions, boys who had attended school very little, but had 'roughed it,' and had used all their faculties in practical living. Newsboys and those who had been trained by necessity to lose no chance of making an honest (or dishonest) penny were the best for our work; while the lads who were the pride of their parents and teachers, and had passed all the standards, were far behind them.

"My experience has confirmed my opinion. I am with the firm of W. Timpson, boot retailers, who has thirty-four shops in the district. Our boys who come to us about fourteen years of age, having passed through school, are dull and show no alertness of mind, often losing chances of promotion through a strange apathy.

"Now, as this heaviness is so constantly found in Board School boys, I have come to the conclusion that the fault lies in the kind of education given.

"Mr. Herbert Spencer says that 'to prepare us for complete living is the function which education has to discharge.' When a sixth-standard boy, aged 12½ years, fails to see any joke in the question, 'If a tram goes at ten miles an hour, what is the price of bacon?' and solemnly reckons it up and answers 8d., one feels his education has not succeeded in its aim.

"I hope our educational system will soon be altered so as to leave boys with the desire and power to acquire knowledge.—Sincerely yours,

"W. WYLBORNE."

of an intimate relation between the schoolroom and the workshop, between those who direct education and those who direct industry, that the change which is needed can be brought about. Nor, indeed, can employers whose work is such that the intelligence of the great majority of their servants is dulled for want of use, lodge a just complaint against schools which fail to foster the intelligence of their pupils. For the improvement of education or of industry, something more than a narrow specialism is needed: the grasp of an ideal comprehensive and humane, the possession of a statesmanlike foresight.*

The importance of a general preliminary training not as yet specialised in view of any particular trade or occupation—a training of the intelligence, of the powers of observation and of the will, an alertness and quickness of response to any stimulus, is admirably taught in a speech delivered not long ago by Mr. Ivan Levinstein before the Associated Chambers of Commerce in Manchester.

+ "Mr. Levinstein said that he was afraid that they were falling into the same error in regard to commercial education as they did some time ago in regard to technical education. They were told some years ago that the German workman was far better technically educated than was the British workman. That was to a great extent a fallacy. In Germany the superior technical education was found only in managers and employers, and these were not only better technically educated than the corresponding class in England, but had received a better and more thorough general education. What were wanted in this country were thoroughly equipped technical schools, with competent teachers, such as was now being provided in Manchester; but even when this school was opened—probably it would be the best in the world—it would be at a great disadvantage compared with the Swiss, American, and German Technical Schools, because there would not be a sufficient number of pupils competent to take full advantage of the special teaching of the school because of the deficiency of their general education. Now in the same way they were told that we were behind Germany in commercial education. But if they considered the methods on which the education of the German clerk was carried on they would see how erroneous was the assumption that he was commercially educated at school. Nothing

* "A country which has looked far ahead, and seen the ever-increasing intensity of international competition, will have learnt that it must strain every nerve to prepare for future struggles. It will see clearly that it cannot afford to pander to the selfishness of individuals, but that it must have a single eye to the interests of the whole nation. Ultimate victory does not await the country which possesses only one or two exceptionally brilliant men; it will be slowly and painfully won by that nation which can command the greatest collective force. The fate of a people, therefore—whatever be its form of government—depends upon the extent to which it cultivates the powers of each individual unit, and on the degree in which it is capable of combining and directing the individual forces, with economy and forethought, towards the aim of national prosperity. And where it is recognised that each individual must be developed to the highest possible realisation of his capacities, we may be sure that the schools will not fail to adopt those methods of education which are sanctioned by scientific laws."—Fabian Ware, "Education and Foundations of Trade and Industry."

† *Manchester Guardian*, March 13th, 1901.

of the kind was the case. The German clerk was educated in the same school as all other children—in the schools which corresponded to our grammar schools. No special attention was paid in these schools to commercial education. What the clerk did get was a sound, general, all-round education; in fact, he was much better educated generally than was the British clerk. In the first place, he remained much longer at school; and in the second, the fees were about one-fourth of those in the English schools. He was offered strong inducements to stay longer at school. It was the custom to apprentice a German lad leaving school to a commercial house, and if he remained the full time at school the term of his apprenticeship was reduced to one and a-half or two years. When the German lad left school he knew little English or French for commercial purposes. If he wanted to learn French he was then sent to Switzerland or Belgium, and if he wished to learn English he was sent to England. He commenced here on a starvation salary, but on his return to his own country he was master of the language, and in addition he had acquired a knowledge of French and English business methods, and his mind had expanded, and he was of wonderful value to his future employer. He had no hesitation in saying that the great expansion of German trade was to a large extent due to this system of education. Let them give the English clerk a thoroughly good general education. Let him remain longer at school, and then let him go to business for two or three years. Then they should send him abroad, and he would come back as well or better equipped for commerce than was the best German clerk. Commercial education was doomed to failure unless they trained their scholars thoroughly in general education in the primary and secondary school.

In the same sense a notable passage from the speech delivered by Professor Dewar at the Belfast meeting of the British Association may be quoted:—

* "I have thought it a matter of great interest to obtain a comparative view of chemical equipment in this country and in Germany, and I am indebted to Professor Henderson, of Glasgow, who last year became the secretary of a committee of this Association, of which Professor Armstrong is chairman, for statistics referring to this country, which enable a comparison to be broadly made. The author of the consular report estimates that in 1901 there were 4,500 trained chemists employed in German works, the number having risen to this point from 1,700 employed twenty-five years earlier. It is difficult to give perfectly accurate figures for this country, but a liberal estimate places the number of works chemists at 1,500, while at the very outside it cannot be put higher than somewhere between 1,500 and 2,000. In other words, we cannot show in the United Kingdom, notwithstanding the immense range of the chemical industries in which we once stood prominent, more than one-third of the professional staff employed in Germany. It may perhaps be thought or hoped that we make up in quality for our defect in quantity, but unfortunately this is not the case. On the contrary, the German chemists are, on the average, as superior in technical training and acquirements as they are numerically. Details are given in the report of the training of 633 chemists employed in German works. Of these 69 per cent. hold the degree of Ph.D., about 10 per cent. hold the diploma of a technical high school, and about 5 per cent. hold both qualifications. That is to say, 84 per cent. have received a thoroughly systematic and complete chemical training, and 74 per cent. of these add the advantages of a university career. Compare with this the information furnished by 500 chemists in British works. Of these only 21 per cent. are graduates, whilst about 10 per cent. hold the diploma of a college. Putting the case as high as we can, and ignoring the more practical and thorough training of the German universi-

* *Manchester Guardian*, September 11th, 1902.

ties, which give their degrees for work done, and not for questions asked and answered on paper, we have only 31 per cent. of systematically-trained chemists, against 84 per cent. in German works. It ought to be mentioned that about 21 per cent. of the 500 are Fellows or Associates of the Institute of Chemistry, whatever that may amount to in practice, but of these a very large number have already been accounted for under the heads of graduates and holders of diplomas. These figures, which I suspect are much too favourable on the British side, unmistakably point to the prevalence among employers in this country of the antiquated adherence to rule of thumb, which is at the root of much of the backwardness we have to deplore. It hardly needs to be pointed out to such an audience as the present that chemists who are neither graduates of a university nor holders of a diploma from a technical college may be competent to carry on existing processes according to traditional methods, but are very unlikely to effect substantial improvements or to invent new and more efficient processes. I am very far from denying that here and there an individual may be found whose exceptional ability enables him to triumph over all defects of training. But in all educational matters it is the average man whom we have to consider and the average ability which we have to develop. Now, to take the second point—the actual money value of the industries carried on in Germany by an army of workers both quantitatively and qualitatively so superior to our own. The consular report estimates the whole value of German chemical industries at not less than fifty millions sterling per annum. These industries have sprung up within the last seventy years, and have received enormous expansion during the last thirty. They are, moreover, very largely founded upon basic discoveries made by English chemists, but never properly appreciated or scientifically developed in the land of their birth. I will place before you some figures showing the growth of a single firm engaged in a single one of these industries—the utilisation of coal-tar for the production of drugs, perfumes, and colouring matters of every conceivable shade. The firm of Friedrich Bayer and Co. employed in 1875 119 workmen. The number has more than doubled itself every five years, and in May of this year that firm employed 5,000 workmen, 160 chemists, 260 engineers and mechanics, and 680 clerks. For many years past it has regularly paid 18 per cent. on the ordinary shares, which this year has risen to 20 per cent., and in addition, in common with other and even larger concerns in the same industry, has paid out of profits for immense extensions usually charged to capital account. There is one of these factories the works and plant of which stand in the books at £1,500,000, while the money actually sunk in them approaches to £5,000,000. In other words, the practical monopoly enjoyed by the German manufacturers enables them to exact huge profits from the rest of the world, and to establish a position which, financially as well as scientifically, is almost unassailable."

Proceeding, Professor Dewar said: "I must repeat that the fundamental discoveries upon which this gigantic industry is built were made in this country, and were practically developed to a certain extent by their authors. But in spite of the abundance and cheapness of the raw material, and in spite of the evidence that it could be most remuneratively worked up, these men founded no school and had practically no successors. The colours they made were driven out of the field by newer and better colours made from their stuff by the development of their ideas, but these improved colours were made in Germany and not in England. Now what is the explanation of this extraordinary and disastrous phenomenon? I give it in a word—want of education. We had the material in abundance when other nations had comparatively little. We had the capital and we had the brains, for we originated the whole thing. But we did not possess the diffused education, without which the ideas of men of genius cannot fructify beyond the limited scope of an individual. I am aware that our patent laws are sometimes held responsible. Well, they are a contributory cause; but it must

be remembered that other nations with patent laws as protective as could be desired have not developed the colour industry. The patent laws have only contributed in a secondary degree, and if the patent laws have been bad the reason for their badness is again want of education. Make them as bad as you choose, and you only prove that the men who made them, and the public whom these men try to please, were misled by theories instead of being conversant with fact and logic. But the root of the mischief is not in the patent laws or in any legislation whatever. It is in the want of education among our so-called educated classes, and secondarily among the workmen on whom these depend. It is in the abundance of men of ordinary plodding ability, thoroughly trained and methodically directed, that Germany at present has so commanding an advantage. It is the failure of our schools to turn out, and of our manufacturers to demand, men of this kind which explains our loss of some valuable industries and our precarious hold upon others. Let no one imagine for a moment that this deficiency can be remedied by any amount of that technical training which is now the fashionable nostrum. It is an excellent thing, no doubt, but it must rest upon a foundation of general training. Mental habits are formed for good or evil long before men go to the technical schools. We have to begin at the beginning; we have to train the population from the first to think correctly and logically to deal at first hand with facts, and to evolve, each one for himself, the solution of a problem put before him, instead of learning by rote the solution given by somebody else. There are plenty of chemists turned out, even by our universities, who would be of no use to Bayer and Co. They are chockful of formulae, they can recite theories, and they know text-books by heart, but put them to solve a new problem, freshly arisen in the laboratory, and you will find that their learning is all dead. It has not become a vital part of their mental equipment, and they are floored by the first emergence of the unexpected. The men who escape this mental barrenness are men who were somehow or other taught to think long before they went to the university. To my mind, the really appalling thing is not that the Germans have seized this or the other industry, or even that they may have seized upon a dozen industries. It is that the German population has reached a point of general training and specialised equipment which it will take us two generations of hard and intelligently directed educational work to attain. It is that Germany possesses a national weapon of precision which must give her an enormous initial advantage in any and every contest depending upon disciplined and methodised intellect."

Little can be done by the efforts of individual employers of labour. There are, as we have said, those who inquire into the school record of boys who apply for work, and only admit those who have passed a given standard. This is the practice of a firm of electrical engineers, Messrs. Royce, Limited, of Manchester, who were kind enough to send us a letter on this subject, together with a detailed report dealing with the qualifications of many of their younger employees. These gentlemen write:—

"We, in selecting boys for employment in our works, other things being equal, always give the preference to those who have not only passed a higher standard at school, but who are able to obtain satisfactory references as to their general conduct during the time they have attended.

"With regard to the second question" (whether any correspondence was noticed between good school records and general usefulness and intelligence at work) "our experience varies considerably. We have frequently found that a lad who has obtained a high standard of excellence in the school at which he has attended, has proved anything but satisfactory as a workman. It appears to us that, in order for a lad to do well, he must, in addition to

possessing a good education, have some decided inclination towards mechanical work. Such inclination being taken for granted,* we certainly consider that the more advanced the general education the better.

"In the majority of boys who apply to us for employment we find that, although they possess in many instances science certificates for various subjects, their general education is extremely rudimentary, and we are of the opinion that a change for the better could be effected by devoting some of the time at present taken up by science subjects to work of a more general character, as we consider that, in many instances, the teaching of science is commenced long before the pupil's general education is such as to enable him to profit by the special instruction given."

This letter seems to us to be of great value; it points to a grave evil and it discovers the cause. When we turn to the detailed reports supplied by this firm, we find that though no boys of a very low school standard are admitted, yet of those who are actually employed, many seventh standard boys are described as less useful and less intelligent at work than others who escaped from school at the fourth standard, and that though it cannot be said that the worse a boy has done at school the better he turns out later on, at any rate no sort of indication is given by the record of his school attainments as to his probable efficiency and intelligence at work. We are forced upon the conclusion arrived at by another writer, an engineer, and employer of boys. He says, "In engaging boys I do not discriminate according to their school attainments. I, of course, prefer bright boys to dull boys, but I do not need to consult their school certificates on that point. I do not think a boy's proficiency in Board School subjects† make any earthly difference to his ability to drill a hole or file a casting, or to do any work he is likely to be given before he is twenty-one." . . . and he continues, "I should be in favour of any combination among employers to engage only boys who have had a good education, as I think it would have an important effect on the efficiency of the working-classes, but I should not expect any immediate, tangible effect in my own business, as boys usually migrate before they are old enough for responsible work, and it would only be when they were re-engaged as older men that their early education would tell."

Clearly the action of a few employers here and there is not enough to bring about the change which is needed—a change not (it must be repeated) in the direction of early specialisation in view of particular industries, but in the direction of the unification of the whole career of the working boy, from his earliest‡ school days onwards to the work of his youth and manhood.

* The writer, it will be seen, is here making two great assumptions.

† It needs hardly be said that the writer is speaking of Elementary School Education as a whole, without discriminating between which are called Board Schools and other Elementary Schools.

‡ The reports most carefully drawn up for us by Mr. Hans Renold and by Messrs. B. S. Massey, and by other employers, all point to the same conclusion.

Let us try to sum up as succinctly as possible the results of foregoing inquiry. It seems plain that whatever else the school may do they cannot yet be said to quicken the intelligence generally so as to make the exercise of the mind pleasant in itself, nor to elicit special aptitudes which may be latent in their pupils. Accordingly, though the boys and girls have learnt reading, writing, arithmetic, and a crowd of other subjects, yet they do not read, still less do they write, and they are perplexed by any calculation which is not expressed in the terms to which they have grown familiar. Leaving school, the children seek employment at random, and, as we have seen in several distinct kinds of industry, they find that not only the specific fragments of knowledge which they acquired at school are of little or no use to them, but the work in which they are employed is not (though, of course, they do not at that early age describe it thus) educational; it fails just where the schools failed, *i.e.*, in combining interest with labour, in associating pleasure with work. As schooling was a thralldom, so work is now a drudgery. Such as it is, there is, however, no difficulty in finding employment. What the worker desires is wages; and so long as they get their wages, it matters very little at first what they do to earn them. They enjoy their independence which they have newly won, and look very far into the future. Their work is mechanical, a thing of routine, and once they have got the knack of it they learn no more. When they reach their seventeenth or eighteenth year they begin to want more money than they have hitherto been receiving, they discover abruptly that they get no more, or very little more money than they earned when they first began, because they are in fact, worth no more to their masters. They can do their share of work, and can do nothing else. Then, once more without forethought, they throw up their work and seek something new. If they are content with labourer's work, that they can get. The experience of the past four or five years neither hinders nor helps them in this. If they look for something higher they have to overcome a great difficulty. They desire skilled work, but they are merely unskilled, they have spent the most impressionable years of their life, whether at school or in their first employment, in a way that they are in great measure incapable of acquiring the skill which is more than dexterity. Those who are most successful often attempt to make good their defects by joining classes at night, or are somewhat oddly called Continuation Schools—schools of necessity, in most of which education is not continued, but continued (the more useful alternative in the circumstances) recommenced, or else supplanted by specialised instruction for receiving which the students have no preparation. It is not remarkable that youths of this age, and with this history, should very quickly leave these schools. A Continuation School can only do the thing which is suggested by its name if there is already a foundation

which to build, if there is, in fact, something to continue ; a technical* school may be elaborately equipped and munificently endowed and yet largely fail to serve the purposes for which it was established, if the intelligence of the pupils has not been sufficiently developed by a general education wisely planned and carefully bestowed before the pupils come to the special classes which such a school provides.

When we sought for the causes which lie at the root of the defects to which we called attention, we saw, first, that a disrelish for books is often produced in the minds of children by their being forced to read the books which can have no charm or interest for them ; next, that an overworked teacher who strives laboriously but mechanically to teach a large number of subjects, in most or all of which he is himself uninterested, to a class too large for him to be able to adapt his teaching to individuals, cannot hope to inspire his pupils with a sentiment which he does not feel himself. We saw besides that very often perfection in the technique of teaching, where method goes without knowledge, may prevent

* This contention, patent in itself, yet curiously neglected in the practical organisation of English education, is confirmed as we have seen by the statements of employers of labour who have given the subject their consideration. It is not always that the opinion of the expert in education agrees with that of men who, like employers, regard education rather in its results than in its processes. There is, however, on this matter a very striking agreement between the statements which have been already quoted and the conclusions reached in the previous pages on the one hand, and the opinion, on the other, expressed with an authority unrivalled in its kind by the Director of the Manchester Municipal School of Technology. Mr. J. H. Reynolds was good enough to place at our disposal the registers of the Institution of which he is in charge, and to give us the advantage of his wide knowledge and experience when we consulted him. Dealing with the question which we have raised, of the difficult position in which a working-class boy finds himself at the age of seventeen or eighteen years, Mr. Reynolds, after premising that the artisan students who attend the evening classes at the Municipal School of Technology "are more favourable specimens of their class than would be found in like institutions elsewhere," continues as follows :—

"It is plainly evident that if students are to get any good from attendance upon evening classes designed to give them a sound theoretical knowledge of science in its application to their particular industry they must at least have remained in the Elementary Day School until fourteen years of age.

"Leaving at an earlier age prevents any proper opportunity of training satisfactorily the general intelligence which is, after all, the factor of prime importance.

"My experience is that if the boy has left school with a genuine love of reading, and has been led to some slight degree to discriminate between what is and what is not worth reading, his further educational development and progress is assured.

"Any deficiencies which may be found in the training given to the pupils in the Primary Schools must, I think (apart from the results of leaving at too early an age, the crying evil of the time), be attributed to the Educational Authority itself. It ought to be possible to exclude for pupils less than fourteen years of age all attempts at specialisation, and to secure that the education given shall be confined to the training of faculty—to the awakening

teaching from achieving its proper end; and once more that patient teaching often meets with disappointing results, because teachers are so intent upon what they are themselves doing that they hardly suffer their pupils to learn. It was suggested, moreover, that particularly for children who leave school at so early an age as most of the pupils of our elementary schools, too great a number of subjects is attempted. We think that if attention was restricted to the barest rudiments, which nevertheless may be treated by a skilful teacher with endless variety, a better result would be achieved, than when the power and interest of both teacher and pupil are dissipated and scattered over a wide range of subjects, most of which cannot be pursued far enough either for their real interest to reveal itself to the minds of those who are engaged upon them, or for any practical commercial advantage to be derived from the study. A child who can read and write and count well has received an education intrinsically more valuable, and one we believe which would stand him in better stead when

of the intelligence—and to the cultivation of a sense of responsibility. Power of intelligent expression of thought and idea—quickenings of the faculty of observation—a general knowledge and understanding of the commonest facts of natural science, power to use numbers, and skill in the graphic arts of writing and of drawing, these would be in my view the best equipment for technical study and should be easily attainable with a moderate degree of development by every pupil; given these all else of a special character relating to the theory and practice of any industry would be easily acquired.

"If a boy has not left school with a thirst for knowledge there has been something wrong with his training or his capacity.

"Though I believe employers are beginning slowly to realise that the necessity for better educated apprentice workmen is urgent, yet but few show any real interest in the matter, or give, other things being equal, any encouragement to those of their apprentices who show a desire to spend time in their education, or who succeed in improving their knowledge. It would most certainly pay employers, due weight being given to other important conditions, to give more responsibility to, and advance pecuniarily, those of their employees who give satisfactory evidence of their pursuit and acquirement of knowledge of the principles of their craft.

"Were this done the advance would be rapid, indeed.

"It is very probable that some employers have found that boys coming with certificates of scientific training are not after all much if any better or more skilful, nay, indeed, they are sometimes inferior to boys who have nothing of the kind to show. But that is mainly for the reason that the real training of the boy has been neglected or turned aside for the sake of one or two special subjects which are, after all, only superficially understood and have little relation to his right education or to the work he is called upon to do in life.

"I cannot but think that the unification of all forms of education under one authority embracing a sufficiently wide area would materially contribute to a more intelligent scheme of training and instruction, to the advancement of the really capable children so that the latent brains of the nation shall be searched out and recovered for its service, and to a wiser economy of the methods and means of education.

"Such an authority, if intelligent and zealous, would quickly bring into harmony all the forces and ideals now so much divorced and unite them for the common good."

he comes to take his part in the practical business of life, than another, who, for the sake of getting fragments of French, or algebra, or physiology, sacrifices what is really essential. There is, indeed, a kind of dishonesty in the superficial treatment of a large number of subjects which is repugnant to a child's mind. A child, of course, likes change and variety, but to show him a number of things which are reputed to be of interest, and to snatch them from his eyes before he can discover their attractions for himself, is only to tantalise him. We urged later that some effective co-operation is needed between teachers and parents; and finally, that school-training must be made, in a way in which hitherto it has not been made, a preparation for later life—not indeed for the several occupations into which boys and girls may enter, but for the general life of the intelligent citizen, who does his specific work with intelligence, because it demands intelligence, and also because his intelligence is not limited within narrow bounds; and in order to secure this end, we ventured to suggest that employers should unite among themselves in making a demand upon the schools for a suitable education, and that a close relation should be set up between those who direct and carry on elementary education, and those who employ the children who receive it.

Two remarks may be made in conclusion. It may be said that no notice has been taken in what has been written above of the exceptional pupils, who bring distinction to their schools and adorn the occupation to which they devote themselves after their school days. There are, of course, such persons, and they no doubt raise the average of the intelligence of the community; but they are exceptional; and we have been describing the equipment and the first stage in the career of the ordinary boys or girls, who never give promise of excellence in any direction. It is as important to the country that the moderate ability of these should be brought to the highest development possible as that the rare powers of the extraordinary person should be artificially fostered and matured. Again, if certain defects of our common education have been noted, no stricture has been intended to be made upon the teachers of our elementary schools. Their work is hard, and it is done with patience and fortitude. The defects to which we have referred have not been caused, and they cannot be cured by any single class or group. They are national, and it can only be when education comes to be regarded as indeed a national concern of fundamental importance, requiring and receiving the co-operation of the practical teacher, of the educational expert, and of the leaders of industry, and when as the result of their labour it has been made to appear valuable and interesting to the masses of the population, that these defects can be removed.

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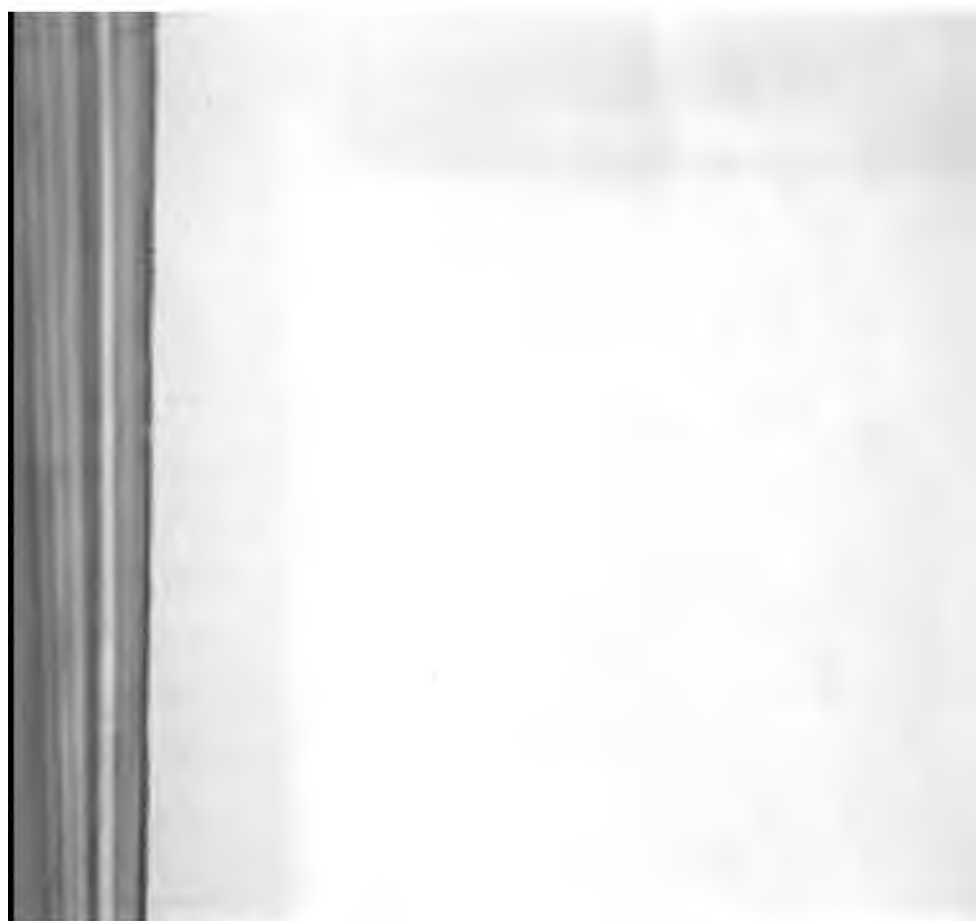
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